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SEARCH REQUEST FORM

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Search Topic: Please write a detailed statement of search topic. De that may have a special meaning. Give examples or a copy of the sequence. You may include a copy o	scribe specifically	as possible the subject	matter to be sean		
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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RESULT 1

PCT-US01-01381A-3

; Sequence 3, Application PC/TUS0101381A

; GENERAL INFORMATION:

; APPLICANT: Isis Pharmaceuticals, Inc.

; APPLICANT: C. Frank Bennett

; APPLICANT: Nicholas M. Dean

; APPLICANT: Lex M. Cowsert

; TITLE OF INVENTION: EXPRESSION

; FILE REFERENCE: RTCD......
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US-60-181-428-71
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                   OF INDUCIBLE NITRIC OXIDE SYNTHASE
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Best Local Similarity
Matches 4145; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo
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TGCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGC	881	Db
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GTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 2880	2821 A 2821 A	Qy Db
AGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGA 28	761 A	Db
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CCTTGGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGG 25	521 A	Qу
CATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAGC	461 C	Db
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GTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCAGCCGACATCCAGCCGTGCCA 2460	401 T	Qy Db
CAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	341 T	Db
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TCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTCG 2340	281 T	Db
CAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTC	281 T	Qy
	221 G	Db
GCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCAC	221 G	Qу
	161 A	Db
CTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGC	161 A	Qy
TCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC 2160	101 C	Db
CGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCCACCTGGGGGGCCTCT	101 ¢	Qy
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AAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTTGGCCTCGGCTCCAGCATGTAC	041 T	Qy
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                                                     TGTACAGTTATTTATGCCTCTGTATTTAAAAAAACTAACACCCAGTCTGTTCCCCCATGGCC
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APPLICANT: C. Frank Bennett
APPLICANT: Nicholas M. Dean
APPLICANT: Lex M. Cowsert
TITLE OF INVENTION: ANTISENSE MODULATION OF INDUCIBLE NITRIC
TITLE OF INVENTION: EXPRESSION
FILE REFERENCE: RTSP-0098
CURRENT APPLICATION NUMBER: PCT/US01/01381A
CURRENT FILING DATE: 2001-01-16
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PRIOR APPLICATION NUMBER: 09/490,208
PRIOR FILING DATE: 2000-01-24
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                            GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT
CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA 600
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5 5	156 156	CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	1501 1501	Qy Db	
5 5	150 150	ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA		Qy Db	
0 0	144 144	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG	1381 1381	Qy Db	
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8 8	132 132	TGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT	1261 1261	Qy Db	
8 8	126 126	AACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	1201 1201	Qy Db	
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	780 780	ATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC	721 721	Qy Db	
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                                CTCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCCTTTACTTGACCTCCTAACAA 3840
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                                                                                                                                                                                     CLASSIFICATION: 436
ATTORNEY AGENT INFORMATION:
NAME: GOULD, Lewis F. Jr.
REGISTRATION NUMBER: 25,057
REFERENCE/DOCKET NUMBER: 1191
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 575-6020
                                                                                                                                              INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
                               STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
DESCRIPTION: Human He
                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Larry L. Shears II
TITLE OF INVENTION: Inducible Nitric Ox
TITLE OF INVENTION: Gene for Treatment
NUMBER OF SEQUENCES: 2
 DESCRIPTION: HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 4145 base pairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Lewis F. Gould, Jr.
ADDRESSEE: Eckert Seamans Cherin & Mellott
STREET: 1700 Market Street, Suite 3232
CITY: Philadelphia
STATE: PA
                                                                                                 TYPE:
                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE:
COMPUTER: IB
                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                               TELEX:
                                                                                                                                                                           TELEFAX: (215) 575-6015
                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Richard K.
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David A. Geller
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Edith Tzeng
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Human Hepatocyte Inducible Nitric
Synthase cDNA Clone
NO
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Best Local Similarity 100.0%;
Matches 4145; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANTI-SENSE: NO
ORIGINAL SOURCE:
TISSUE TYPE: Induced Human Hepatocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       UNITS: unknown FEATURE:
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LIBRARY: Lambd
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781 AGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTCT 840
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LOCATION: 207..3668
IDENTIFICATION METHOD:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA 600
                                                                                                                                                                                                                                    GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT 540
                                                                                                                                                                                                                                                                                       TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA 480
                                                                                                                                                                                                                                                                                                                                                                                              CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC 360
                                                                                           GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAACCGGTAACAAAGG 720
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                                                                                                                                               AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTTGTCAACCAATATTACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTTCTGTTCAAGACCA 240
                         AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC
                                                                               GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG
                                                                                                                                   AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACG
                                                                                                                                                                                     CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA
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Pred. No. 0;
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GCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA 1	1861 C	Qy
AATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAG	1801 C	Db
ATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGA		Qy
GATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAG 	1741 A 1741 A	Qy Db
GGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCCGAGAGACCCAAGAGAAAGAG 	1681 A 1681 A	Qy Db
ACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTAT	621 T	Db
ACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTA	1621 T	Qy
	1561 G	Db
TCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	1561 G	Qy
CATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAGTACATGCAGAATGAAT	1501 C	Db
ATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	1501 C	Qy
CCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA	1441 A	Db
CAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTG	1441 A	Qy
GGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAAG	1381 T	Db
GAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAA	1381 T	Qy
	1321 G	Db
TACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATC	1321 G	Qy
	1261 T	Db
GCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGC	261	Qy
ACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	1201 A	Db
CATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	1201 A	Qy
GAGCTCT	1141 A	Db
GGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATG	1141 A	Qy
GETCCCCCTGGTCCTGCAGGCC	1081 Å	Db
CTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGC	1081 A	Qy
GCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCG	1021 T	Db
CCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCAT	1021 т	Qy
GCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCATCCGCTATGCTGGCTACCAG	961 A	DЬ
GGCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCATCCGCTATGCTGGCTACCA	961 A	Qy
ACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCCAGCGGAGT	901 G	Db
TACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCCAGCGGAG	901 0	Qy
		Db
GATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTG	841 1	ν 2
	781 A	Db

ACA 3000 ACA 3000	41 CCTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACC	29	Db Qy
GCT 2940 GCT 2940	81 CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCA	28	4d 6y
TGT 2880 TGT 2880	21 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGG	у 28 ъ 28	ā ö
GGA 2820 GGA 2820	61 AAGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGT	7	<u>Б</u> 16
CAG 2760 CAG 2760		27	9d 60
ccc 2700 ccc 2700	41 ACTGGGTCAGTGACAAGAGGCTGCCCCCTGCTCACTCAGCCAGGCCCTCACCTACT	26 26	Qy Qy
3CT 2640 1 3CT 2640	81 TGGATGGCCCCACACCCCACAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAG	25	Db Qy
rgg 2580 rgg 2580	21 ACCTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGT	25	Db dq
AGC 2520 111 AGC 2520	61 CCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGA	24	B 8
CCA 2460 CCA 2460	01 TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGC 	24	DB Qy
ACG 2400 ACG 2400	41 TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	2 2 3	ФФ
rcg 2340 : rcg 2340	81 TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCGCACCACTACAGGCT	22	Db Qy
ACA 2280 ACA 2280	21 GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCA 	22	Ωу
CT 2220	61 AGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAG	, 21	dd VQ
TC 2160	01 CTCGGTTCTGCGCCTTTGCTCATGACAITGATCAGAAGCTGTCCCACCTGGGGGCCTC	21 21	70 VQ
ACC 2100 	41 TGAAAGAGCTCAACAACTAATTCAGGTACGCTGTGTTTGGCCTCCGGCTCCAGCATGTF 	20	D Q
GC 2040	GTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCAT 	19	g Qy
TA 1980 TA 1980	TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGTGACCAG	19	ph Q
CA 192	1 CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTC) 18	맖

TACAGTTATTTATGCCTCTGTATTTAAAAAACTAACACCCAGTCTGTTCCCCATGGCC 4080 	ACA ACA	402	Qy Db
ACCACTTCAAGTGACCACCAGGAGGTGCTATCGCACCACTGTGTATTTAACTGCCTTG 4020	CCAC	396 396	Qy Db
ACAAAATCTTAAA ACAAAATCTTAAA	AGACAAA AGACAAA	3901 3901	Db Qy
PAGCACCCTGGATTGATCGGAGCCTCCTCTCAAACTGGGGCCTCCCTGGTCCCTTGG 3900	GTAGCAC GTAGCAC	3841 3841	Qy Db
NCAAGTETTATTTEETEAACGTTGETECECCATEAAGCEETTTAETTGACETECAACAA 3840 - - - - - - - - - - - - - - - - - - -	CTCAAG 	3781 3781	Qy Db
TCTGCATTATCTGAGGTCACAGGGCCTGGGGAGATGGAGGAAAGTGATATCCCCCAGC 3780	160 160	372: 372:	Qy Db
CTCTGAGGGCCTACAGGAGGGGTTAAAGCTGCCGGCACAGAACTTAAGGATGGAGCCA 3720 	CGCTCTG	3661 3661	Qy Db
CCTTACGAGGCGAAGAAGGACAGGGTGGCGGTGCAGCCCAGCAGCCTGGAGATGTCAG 3660	TTCCTTA	3601 3601	ОУ
TATTTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTGTAT 3600 	ACTATTT	3541 3541	Qy Db
CACACCCTGAAGCAGCTGGTGGCGCCAAGCTGAAATTGAATGAGGAGCAGGTCG 	CCCACAC [Qу
CACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACGTGG 3480	TCCACA TCCACA	3421 3421	ОУ
AAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGC 3420	CCAAGGT	3361 3361	Фу
GCCCAGAAGGGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGCCTGCCT	TGGCCC!	3301	Qу
GTGTTTGGGTGCCGCCCAGATGAGGAGCACATCTACCAGGAGGAGATGCTGGAGA 3300 	TGGTGT 	3241	Qy Db
TGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCATGACCT 3240 	GCA	3181 3181	Оy
CCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGCAGTT 3180 	ATCCCTC ATCCCTC	3121 3121	Qy Db
CCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCGAGG 3120 	AGCCCC# AGCCCC#	3061 3061	Qy Db
GGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTGA 3060 	A - A	3001	Оу

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US-09-053-375B-110
; Sequence 110, Application US/09053375B
; GENERAL INFORMATION:
APPLICANT: Chenchik, Alex
APPLICANT: Chenchik, Alex
TITLE OF INVENTION: Nucleic Acid Arrays
FILE REFERENCE: CLON-006
; CURRENT APPLICATION NUMBER: US/09/053,375B
; CURRENT FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 1543
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 110
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 4145
TYPE: DNA
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601 AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTTGTCAACCAATATTACG 660
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                                                                                                                                                                                                                                                                                                        241 AATTCCACCAGTATGCAATGAATGGGGAAAAAGACATCAACAACAATGTGGAGAAAGCCC
                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                      121 AGCCAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAA 180
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                                      CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA 600
                                                                                       GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT 540
                                                                                                                                                                                        AGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATGTCTCGG
                                                                                                                                                                                                                                         GTGACCTTCTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA 240
                                                                                                                                         TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA 480
                                                                                                                                                                                                                                                                                                                                                                                         AGCCAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCTTTAAAATCTCTCGGCCACCTTTGATGAGGGGACTGGGCAGTTCTAGACAGTCCCG
AATTCCACCAGTATGCAATGAATGGGGAAAAAAGACATCAACAATGTGGAGAAAGCCC
                                                                                                                                                                                                                                                                                                                                          GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCTTTAAAATCTCTCGGCCACCTTTGATGAGGGGACTGGGCAGTTCTAGACAGTCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 4145; 100.0%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 4145;
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                                                                                                                                                                                                                   420
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1740 1740	AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAGAG	1681 1681	Qу Db
1680 1680	TCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATC	1621 1621	Qy Db
1620 1620	GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGCTCCCTCC	1561 1561	Qy Db
1560 1560	CCATCATGGACCACCACTGGGTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	1501	Db
50		- A	Db
0	CAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGT	1441	Qy
1440 1440	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCCGCTCTGGAAAG	1381	Db
1380	GTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACA	. ω 2	d Db
1380	GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCC	1321	Qy
32	TGGCCAACATGCTGCTTGAAGTGGGCGGGCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT	N	Db
1320	GGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCCAGGGTGCCCCTTCAATGGC	1261	Qy
26	AACATCCCAAATACGAGTGGTTCCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCAG	N	Db
א ל	CCAAATACGAGTGGTTTTCGGGGAACTGGAGCTAAAGTTGTBACLIATGGTAGTBACGTGGTAGTGGTAGTGGTGGTGGTGGTGGTGGTGGTGGTGG	20	
1200	ATIGGCGTIGACCTGTAGGTCTTGGAAATCCCACGTGGCTTGTGTTGTAGGTGGCCATGG	1141	Db CY
14	CCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTTGTTCCCCTGGTCCTGCAGGGC	.08	Db.
1140	ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA	0	Qy
1080	TGCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCG	1021	Db
1080	GCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATC	1021	Qy
	ATGCCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCA	961	Db
1020	TGGCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCATCCGCTATGCTGGCTACC	ത	Qy
	GTTACTCCACCAACGATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCCAGCGGAGTG	901	DЪ
960	TTACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCCAGCGGAGT	901	Qy
900	TCGATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGC	841	dd .
900	CGATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTG	841	Qy
840	AGGCCTGGCGCAATGCCCCACGGTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTCT	781	Db
840	GGCCTGGCGCAATGCCCCAACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTC	781	Qy
780	AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC	721	Db
780	ATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAG		Qy
720		661	dd
720	TCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAG	661	Qy
660	AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTTGTCAACCAATATTACG	601	Db

	AAGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCC	ര്	DP 42
CTGTGCCAGCCCTCAGAGTACAGCAAGTGGA	A AGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCL	J .	Q !
CIGCICC!	GCTCC!	2701 2701	B 64
GCTCACTCAGCCAGGCCCTCACCTACTCCC 27	CTCACI	2641 2641	Фу
GCCTGGAGGACCTGGATGACAGTGGCAGCT 264	GCCTGGP GCCTGGP	2581 2581	Qу
CCCTGGTCCAAGGCATCCTGGAGCGAGTGG 258	GCCGGCCCTGG GCCGGCCCTGG	2521 2521	ОУ
AAGGCCTGAACTACCTGCCGGGGAGC 252 	A - A	2461 2461	Оy
AATCTACAAAGTCCGACATCCAGCCGTGCCA 2460 	AATC: AATC:	2401 2401	Оу
AAAGCCCTCAGCAGCATGCATGCCAAGAACG 2400 	GCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCC 		Оy
TGACCTGGGACCCGCACCACTACAGGCTCG 2340	TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTG	N N	DP QA
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TCAGTGGGCAGGAGGACGCCTTCCGCAGCT 2220	3GGGATGAGCTCAGTGG 3GGGATGAGCTCAGTGG	2161 2161	Оy
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AGGAACGCTGCTGTTGGTGGTGACCAGTA 1980 	AACG AACG	1921 1921	Оу
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282: 282: 288: 288: 298: 300 300 300 300 310 310 310 310 310 310	AGACAAAATCTTAAATGCCAGGCC	390	Qγ
9 2821 AGTTCACCAACAGCCCCAACTTCCTGGAGGTTCCTAGAGGAGTTCCCGTCCCGGGGGTGT 288 2821 AGTTCACCAACAGCCCAACTTCCTGAGAGTTCCAGAGGAGTTCCCGTCCCGGGGTGT 289 2821 AGTTCACCAACAGCCCAACTTCCTGAGAGTTCCAGAGGAGTTCCCCCCCC	GTAGCACCCTGGATTGATCGGAGCCTCCTCTCAAACTGGGGCCTCCCTGGTCCCTTGG	384	P 8
9 2821 AGTTCACCAACAGCCCCAACTTCCTGGAAGTTCCTAGAGGAGTTCCCGTCCCGGGGGTGT 288 b 2821 AGTTCACCCAACGCCCCAACTTCCTGGAAGTTCCCAGGAGTTCCCGTCCCTGCGGGTTCT 289 c 2821 CTGCTGGCTTCCTGCTTTCCCAGTTCCCAGTTCTGAAGCCCCAGGAGTTCTACTCCCCTGCGGGTTCTACTTCCAGTTCCCAACTTCCAAAGTTCCCCTCCCCCCTGCGGGTTCTACTTCCAGTTCCAACTTCCAAAGTTCCCACTCCCCCCCC	GTAGCAACCTGGATTGATCGGAGCCTCCTCTCTCAAACTGGGGCCTCCCTGGTCCCTTGG 3	20	2
9 2821 AGTTCACCANACGCCCCAATTCCTGGAAGTTCCTAGAGGATTCCCGTCCCTGCGGGTGT 288 b 2821 AGTTCACCAACAGCCCCAATTCCTGGAAGTTCCCAGAGTTCCCGGGGGTGT 288 b 2821 AGTTCACCAACAGCCCAACATTCCTGGAAGTTCCCAGAGTTCCCGGGGGTGTCACCTGCAGGTTCTACTTCAACTCCAACATTCCTGAAGCTCCCAACATTCCTGAAGCTCCCAACATTCCTGAAGCTCCCAACATTCCAGGAGTTCTACTCCAACTCCCAACATTCCAACAGTTCCAACTCCCATTCTGAAGCCCAAGTTCTACTCCAACTCCATTCCAACTCCCATTCTGAAGCCCAAGTTCTACTCCAACTCCATTCCAACTCCCATTCTGAAGCCCAAGTTCTACTCCAACTCCATTCCAACTCCCATTCTGAAGCCCAAGTTCTACTCCAACTCCATTCCAACTCCCATTCTGAAGCCCAACTTCTACTCCAACTCCATTCCAACTCCATTCCAACTCCCATTCTGAAGCCCAACTTCTACTCCAACTCCATTCCAACTCCCATTCCAACTCCATTCCAACTCCAACATTCCACCA	CICAAGICITATITCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAA	78	ħ 5
1111	CTTCACTTAACAA 3	1	? ;
9 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGGGGTGT 288 2821 AGTTCACCAACAGCCCCCACATTCCTGAGGGTGTCTAGAGGAGTTCCCGTCCCTGGGGTGT 288 2821 AGTTCACCAACAGCCCCCACATTCCTGAAGGACTTCCAAGGAGTTCCTCCGTCCCTGCGGTGT 288 2821 CTGCTTGGTTTCCTGTCTTTCCCAGCTCCGAGGTGTCTAAGAGACTTCCCGTCCCTGCGGTGT 289 2821 CTGCTGGGTTCCTTTCCCAGCTCCCCATTCTGAAGGCCCAAGGTTCTACCACTACCACA 2821 CTTCCCGGGATCAACACGCCCACGGAGATCCACCTGACCTGGGCCTTCCACCTACCACA 382 AGTTCACCAGGATCAACACGCCCAAGGATCCACCTGACCTGGGCCTTCCACCTCCACCACA 382 AGTTCACCAGGAACACCCAGGACCCACGGTGTCTCACCCACC	GCTCTGCATTATCTGAGGTCACAGGGCCTGGGGAGATGGAGAAAGTGATATCCCCCAGC 3	72	ph Qy
Y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGTGT 288	. CGCTCTGAGGGCCTACAGGAGGGGTTAAAGCTGCCGGCACAGAACTTAAGGATGGAGCCA 3	66	Db
111111111111111111111111111111111111	CGCTCTGAGGGCCTACAGGAGGGGTTAAAGCTGCCGGCACAGAACTTAAGGATGGAGCCA 3	99	Qy
1	TTCCTTACGAGGCGAAGAAGGACAGGGTGGCGGTGCAGCCCAGCCAG	60	Db
Y	TCCTTACGAGGCGAAGAAGGACAGGGTGGCGGTGCAGCCCAGCAGCCTGGAGATGTCAG 36	6	QY
Y	CTATTTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTGTAT 36	G	Db
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAAGGTGCCTAGAGGAGTTCCCGTCCCGTGGGGTGT 288	CTATTTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTGTAT 36	5	Qy
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTGCGGGTGT 288		4	οb,
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTGCGGGTGT 288	CCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGGTCGAGG 35	4	ο ν
y 2821 AGTTCACCACACCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTGGGGGTGT 288		42	DЬ
y 2821 AGTTCACCACACCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTGGGGTGT 288	CCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGGATGTGCGCGATGGCCCGGGACGTGG 34	4	VΩ
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTGCGGTGT 2881	CAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGC 34	36	Db
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAAGAGTTCCCGTCCCTGCGGGTGT 288 b 2821 AGTTCACCAACAGCCCCAACAGCCCCCACATTCCTGGAGGTGCTAGAAGGAGTTCCCCTGCCGTCCCTGCGGGTTGT 288 c 2821 CTGCTGGCTTCCTGCTTTCCCAGCTCCCAGTCTCTGAAGCCCAGGTTCTACTCCATCAGCTCCAGCGTTCTACTCCAGCTCCCAGCGTTCTACTCCAGCTCCCAGCGTTCTACTCCAGCTCCCAGCGTTCTACTCCAGCTCCAGCTTCTACTCCAGCTCCAGCTTCTACTCCAGCTCCAGCTTCTACTCCAGCTCCAGCTTCTACTCCAGCTCCAGCTTCTACTCCAGCTCCAGCTTCTACTCCAGCTCCAGCTTCTACTCCAGCTCAGCTTCAGCTCCAGCTTCAGCTCCAGCTCAGCTTCAGCCCAGCTTCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCACAGTTCTGAAGCCCAAGCCCAAGCCCACACAGCTTCAACACCCTCCACCACAGCTTCAACACCCTCCACCACAGCTTCCACCCTACCACACAGCCTCAACAGCCCACAGATCCACCACAGCTTCCACCACACAGCCTGAACAACACCACAAGACCCACAGGTTCTCCACCACACAGCCTGAAGACCCACAGGTCCCCCACACAGCCTGCACCACACAGCCTGAAGACCCAAGAGCCCAAGACCCAAGAGCCCAAGACCCAAGAGCCCAAGACCCACAGGTTCTCCACCTCCCCCAAGAGACCCAAGAGCCAAGAGCCAAGAGCCAAGAGCCAAGAGCCAAGAGCCAAGAGCCAAGAGCCAAGAGCCAAGAGCCAAGAGCAAGAGCAAGAGCAAGAGAAGA	CAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCAGCCAGC	36	ΩУ
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAAGAGAGTTCCCCTGCGGGTGT 288 b 2821 AGTTCACCAACAGCCCCAACATTCCTGGAGGTGCTAGAAGGAGTTCCCCTGCCGTCCCTGCGGGTGT 288 c 2821 CTGCTGGCTTCCTGCTTTCCCAGCTCCCAGCTCCAGAGGAGTTCCCAGCTCCCAGCGCTCCAGCGTGCAGCTCCAGCGCTCCAGCGCTCCAGCGCTCCAGCGCTCCAGCGCTCCAGCGCTCCAGCGCTCCAGCGCCAGGTTCTAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCCACCA	GGCCCAGAAGGGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGGCTGCCTGGCAAGC 33	ū	Дb
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTGCGGTGT 288	GGCCCAGAAGGGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGCCTGCCT	w	Qy
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCTGCGGGTGT 288 b 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288 c tractagactagactagactagactagactagactagact	GGTGTTTGGGTGCCGCCCAGATGAGGACCACATCTACCAGGAGAGAGTGCTGGAGA 33	24	Db
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCTGCGGGTGT 288	GGTGTTTGGGTGCCGCCGCCCAGATGAGGACCACATCTACCAGGAGGAGATGCTGGAGA 33	24	Qy
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTGCGGTGT 288 b 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTGCGGGTGT 288 ctroctagacttcctacacacaccccacattcctgaaggtgctaagacccaggtcctacccacaccaccatcacctcaccatcacct 294 ctroctagacttcctgctttccaacaccaccattctgaagcccaaggtctaacccaatcacct 294 ctroctagacttcctgctttccaccacaccaccattctgaagcccaaggtctacccaccaccaccaccaccaccaccaccaccaccacc	CTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCATGACCT 32	18	Db
2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTGCCGGGTGT 288 b 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288 c c c c c c c c c c c c c c c c c c c	CTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCATGACCT 32	18	Qy
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGTGT 288 b 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288 c 276cTgGCTTCCTGCTTCCCAGCTCCCATCTGAAGGCCAGGTTCTACTCCATCAGCT 294 c 2881 CTGCTGGCTTCCTGCTTTCCCAGCTCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294 c 2881 CTGCTGGCTTCCTGCTTTCCCAGCTCCCATTCTGAAGCCCAAGGTTCTACTCCATCAGCT 294 c 2941 CCTCCCGGGATCACACGCCCCACGAGATCCACCTGACTGTGGCCGTGTCACCCTACCACA 300 c 2941 CCTCCCGGGATCACACGCCCACGAGATCCACCTGACTGTGGCCGTGTCACCCTACCACA 300 c 2941 CCTCCCGGGATCACACGCCCACGAGATCCACCTGACCTG	TCCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGCAGTT 31	12	Db
2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTGCCGGGTGT 288 b 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288 c 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288 c 2821 CTGCTGGCTTCCTGCTTTCCCAGCTCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294 c 2821 CTGCTGGCTTCCTGCTTTCCCAGCTCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294 c 2821 CTGCTGGCTTCCTGCTTTCCCAGCTCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294 c 2941 CCTCCCGGGATCACACGCCCACGGAGATCCACCTGCTGTGGCCGTGGTCACCTACCACA 300 c 2941 CCTCCCGGGATCACACGCCCACGGAGATCCACCTGCCGTGGTCACCCTACCACA 300 c 2941 CCTCCCGGGATCACACGCCCCACGGAGATCCACCTGCACGTGTCACCCTACCACA 300 c 3001 CCGGAGATGGCCAACAGCCCCACGGGAGATCCACCTGCAGCATGGCTCAACAGCCTGA c 3001 CCGGAGATGGCCAGGGTCCCCTGCACCACCTGCAGCACAGCCTGA 300 c 3001 CCGGAATGGCCAGGGTCCCCTGCACCACCACGCTGGAACAGCCTGA 300 c 3001 AGCCCCAAGACCCAGTGCCCTGCACCACCACGGAATGCCAACAGCCTCCACCCTCCCCCGAGG 31: c 3061 AGCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAAGCGCCTTCCACCTCCCCCGAGG 31: c 3061 AGCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAAGCGCCTTCCACCTCCCCCGAGG 31:	TCCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGCAGTT 31	12	Qy
2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTGCGGGTGT 288 b 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288 c 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288 c 2821 CTGCTGGCTTCCTGCTTTCCCCAGCTCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294 c 2821 CTGCTGGCTTCCTGCTTTCCCCAGCTCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294 c 2821 CTGCTGGCTTCCTGCTTTCCCAGCTCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294 c 2821 CCTCCCGGGATCACACGCCCAGGAGATCCACCTGACCTG	GCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCGAGG 31	ö	Db
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAACGAGTTCCCGTCCCTGCGGTGT 288 b 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAACGAGTTCCCGTCCCTGCGGGTGT 288 c 2821 CTGCTGGCTTCCTGCTTTCCCAGCTCCCATCTGGAGGTGTCTAGTCCCAGCTCCATCAGCT 294 c 2881 CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294 c 2881 CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAAGCTCCATCAGCT 294 c 2881 CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAAGCTCCATCCA	GCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCGAGG 31	90	Qy
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAAGAGTTCCCGTCCCTGCGGGTGT 2881 b 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAAGAGTTCCCGTCCCTGCGGGTGT 288 y 2881 CTGCTGGCTTCCTGCTTTCCCAACAGCTCCCACTCTGAGGTTCTACTCCATCAGCT 294 cTGCTGGCTTCCTGCTTTCCCAACATCCCATTCTGAAGCCCAAGGTTCTACTCCATCAGCT 294 b 2881 CTGCTGGCTTCCTGCTTTCCCAGCTCCCATTCTGAAGCCCCAAGGTTCTACTCCATCAGCT 294 cTGCTGGCTTCCTGCTTTCCCAGCTCCCATTCTGAAGCCCCAAGGTTCTACTCCATCAGCA 300 y 2941 CCTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGGCCGTGGTCACCCTACCACA 300 b 2941 CCTCCCGGGGATCACACGCCCCACGGAGATCCACCTGCACTGTGGCCGTGGTCACCCTACCACA 300 cCGGAGAGATGGCCAACGGCCCACGGAGATCCACCTGCACACAGCCCTGACACACAC	CGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTGA 30	0	Db
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAAGAGTTCCCCTGCCGGGTGT 288 b 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAAGAGTTCCCGTCCCTGCCGGTGT 288 c 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAAGACGCAGGTTCCTGCGGTGT 288 c 2821 CTGCTGGCTTCCTGCTTTCCCAAGCTCCCATTCTGAAGCCCAAGGTTCTACTCCAATCAGCT 294 l	CGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTGA 30	0	Qy
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAAGGAGTTCCCCTGCCGGGTGT 288 b 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAAGGAGTTCCCGGTCCTTCCGGGGTGT 288 c 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288 c 2821 CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294 c 2821 CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAAGGTTCTACTCCATCAGCT 294 c 2821 CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAAGGTTCTACTCCATCAGCT 294 c 2821 CTGCCTGGGATCACACGCCACGAGATCCACTGTGGCGTGGTCACTCCATCACACA 300	CTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCACA 300	9	DЪ
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288 b 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288 c 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCCGGGTGT 288 c 2881 CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294 c 2881 CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294	CTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCACA 300	94	Qy
y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288	TGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294	88	Db
2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288	TGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294	88	Qy
Y 2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAAGGAGTTCCCCGTCCCTGCGGGTGT 288	GTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 288	82	Db
	GTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCCGTCCCTGCGGGTGT 288	82	Qy

360 300

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FILE REFERENCE: 187868

CURRENT APPLICATION NUMBER: US/09/176,496A

CURRENT FILING DATE: 1998-10-21

EARLIER APPLICATION NUMBER: 08/465,522

EARLIER FILING DATE: 1995-66-05

EARLIER FILING DATE: 1995-68-314,917

EARLIER FILING DATE: 1994-09-28

EARLIER APPLICATION NUMBER: 07/981,344

EARLIER APPLICATION NUMBER: 07/981,344

EARLIER APPLICATION NUMBER: 07/981,344
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 1
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APPLICANT: Tzeng, Edith
APPLICANT: Nussler, Andreas K.
APPLICANT: Geller, David A.
APPLICANT: Simmons, Richard K.
APPLICANT: Simmons, Richard K.
APPLICANT: Shears II, Larry L.
TITLE OF INVENTION: Inducible Nitric Oxide Synthase Gene
TITLE OF INVENTION: Disease
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Induced Human Hepatocyte RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: CDS
LOCATION: (207)..(3668)
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              241 AATTCCACCAGTATGCAATGAATGGGGAAAAAGACATCAACAACAATGTGGAGAAAGCCC
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                                                 GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA
                                                                       GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA
                                                                                                                       AGCCAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAA
                                                                                                                                                                                                                                                                CTGCTTTAAAATCTCTCGGCCACCTTTGATGAGGGGACTGGGCAGTTCTAGACAGTCCCG 60
                                                                                                                                           AGCCAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGAGATAA 180
                                                                                                                                                                                            AAGTTCTCAAGGCACAGGTCTCTTCCTGGTTTGACTGTCCTTACCCCGGGGAGGCAGTGC
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2401 TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCCA 2460 	Оy
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B61 CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA 19 	
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441 ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA 15 	Qy 1
381 TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTCGGAAAG 1	Qy]
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3540 3540	1 CCCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAA	Qy 348 Db 348	
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3420 3420	1 CCAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGC	Qy 336 Db 336	1 0
3360 3360	1 TGGCCCAGAAGGGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGCCTGGCTGG	Qy 330 Db 330	
3300	1 TGGTGTTTTGGGTGCCGCCGCCGCAGATGAGGACCACATCTACCAGGAGAGAGTGCTGGAGA	Qy 324 Db 324	
3240 3240	1 TCTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCATGACCT	Qy 318 Db 318	п О
3180 3180	1 ATCCCTCCCATCCTTGCATCCTCATCCGGCCTGGCACAGGCATCGTGCCCTTCCGCAGTT	Qy 312 Db 312	U 0
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2820 2820	AAGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGA	y 2761 b 2761	U 0
2760 2760	. CGGACATCACCACACCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAG	y 2701 b 2701	D 0
2700 2700	ACTGGGTCAGTGACAAGAGGCTGCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCCC		Qy Db
2640 2640	TGGATGGCCCCACACCCCACCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGCT 2	y 2581 b 2581	dd Vo
2580 2580	ACCTIGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGG 2	y 2521 o 2521	Qy Db
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LENGTH: 4145
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                                                                                                                                                                                                                                                                                                            APPLICANT: Chenchik, Alex
APPLICANT: Lukashev, Matvey E.
TITLE OF INVENTION: Human Neurobiology Array
                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/440,302A CURRENT FILING DATE: 1999-11-17 PRIOR APPLICATION NUMBER: 09/053,375 PRIOR FILING DATE: 1998-03-31
                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 1193
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                    FILE REFERENCE: CLON-006CIP11
                                                                                                                                          ORGANISM: Homo Sapiens
                                                                                                                                                               TYPE: DNA
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                                                                                 Similarity
                                                                   Conservative
                                                                                100.0%; Score 4145; 100.0%; Pred. No. 0;
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                                            ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA 1140
                                                                                  GTTACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCAGCGGAGTG
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                             ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA
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GTGAGACGTTTGATGTCCGAGGCAAACAGCACA 2280	1 GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTT	222	Qy
AGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCT 2220	1 AGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGG	216: 216:	da V9
TTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC 216	1 CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAA 	210; 210;	Qy Db
ACGCTGTGTTTGGCCTCGGCTCCAGCATGTACC 210	1 TGAAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTT	2041	Qy Db
TGGAGAGAACTGAAGAAATCGCTCTTCAT 	1 CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAGAA 	1981 1981	Qy Db
GGAGGAACGCTGCTGTTGGTGGTGACCAGTA 198 	1 TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACG	1921 1921	. Qy
CAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA 192 	AGCTGTGC	1861 1861	Ωy Db
TCCTCTTTGCGACAGAGACAGGAAAATCAGAGG 1860 	CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGC	1801 1801	Db dd
TGTGCTCTTTGCCTGTATGCTGATGCGCA 	AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTT	1741 1741	Qу
GCAGGACGAGAAGCGGAGACCCAAGAGAAAG 	AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGA	1681 1681	Оу
TGAACTACGTCCTGTCCCCTTTCTACTACTATC 1680	TCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGT	1621 1621	Оу
GATTTGGCTGGTCCCTCCCATGTCTGG 	GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCT	1561 1561	Qy Db
ATCCTTCATGAAGTACATGCAGAATGAATACC 15 	CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATG	1501 1501	Qу
GTGATCCATAGTTTTCAGAAGCAGAATGTGA 15 	ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCAT	1441 1441	Фр
GGAAACGCACAAGCTGGCCTCGCTCTGGAAAG 1440	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCAC 	1381 1381	Qy Db
GGACTTCTGTGACGTCCAGCGCTACAACATCC 1380 	GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGT	1321 1321	Оy
CCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT 1320	CTGGAGTTC CTGGAGTTC	1261 1261	Оу
ACTGGAGCTAAAGTGGTACGCCCTGCCTGCAG 1260 	CTGGAGCTA	1201 1201	Qy
CCCACCTGACCTTGTGCTTGAGGTGGCCATGG 1200	CCACCTGAC	1141	Db

GUTGCATGCGGTGCACACAGCCTATTCCCGCCTGCCTGGCAAGC 3360	100 1-1	3301	Qy Db
(CCCC)			שני
CGCCCAGATGAGGACCACATCTACCAGGAGGAGATGCTGGAGA 3300	666	24	o _y
CATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCATGACCT	ATG	3181	Db
CATGACTCCCAGCACAAG	CTGGCAGCAACGGCTCCATG	3181	Qy
ATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGCAGT	CCTTGCATCC	3121	Db
ATCCTCAT	TCCCTCCCATCCTTGCATCC	3121	Qy
CCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCGAG	ACCCAGTGCCCT		Db
CCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCGAGG 3120	CCCCAAGACCCAGTGCCCT	3061	Qy
CCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTG	GGCCAGGGTCCCC	3001	Db
CCCTGC	CGGAGATGGCCAGGGTCCCC	3001	Qy
CCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCAC	GGATCACACGCCC	2941	da
CCCACGAGATCCACCTGACTGTGGCCGTGGTCACCTACCACA 3000	CTCCCGGGATCACACGCCC	2941	Qy
CCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAG	8=	2881	Db
CCCAGCTCCCCATTCTG	TGCTGGCTTCCTGCTTTCCC	2881	Qy
ACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 2880	AT-	2821	Db
CATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTG	GTTCACCAACAGCCCCACAT	2821	Qy
AGGCTGGAGGCCCTGTGCCAGCCCCTCAGAGTACAGCAAGTGGA 2820	വ –	2761	Db
GCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGG	AGAGCCTGAGAGACAGAGGC		Qy
CAACCCAGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAG 2760	CGGACATCACCACACCCCCAAC		Db
CAACCCAGCTGCTCCAAAAGCTGGCCCAGGTGGCCACA	GGACATCACCACACCCC	2701	Qy
GGCTGCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCC	6	2641	Db
GGCTGCCCCCTGCTCACTCAGCCAGGCCCTC	CTGGGTCAGTGACAAGAGGC	2641	Qy
ACCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGC	\circ	2581	DЬ
ACCAGACAGTGCGCCTGGAGG	GGATGGCCCCACACCCCACC		Qy
GCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTG	CA	2521	Db
GCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCG	CCTTGGGGTTTGCCCAGGCAL	2521	Qγ
CTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAG	G	2461	Db
CCTGTGAGGATGG	CATCCTGGTGGAACTCTCCT	2461	Qy
AATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGC	ATC	2401	Db
AATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCC	GTTCACCATGAGGCTCAAATC	2401	Qy .
TGGACCTCAGCAAAGCCCTCAGCAGCATGCATGCCAAGAA	ନ୍ଥ =	2341	Db
TGGACCTCAGCAAAGCCCTCAGC	GCAGGACTCACAGCCTTTGG	2341	Qy
ACACCTCCAATGTGACCTGGGACCGCCACCACTACAGGCTCG 2340	CAC	2281 2281	Qу
GGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA 228	ရှ	2221	Db

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APPLICANT: Chenchik, Alex
APPLICANT: Lukashev, Matvey E.
TITLE OF INVENTION: Human Neurobiology Array
FILE REFERENCE: CLON-006CIP11
CURRENT APPLICATION NUMBER: US/09/440,302B
CURRENT FILING DATE: 1999-11-17
PRIOR APPLICATION NUMBER: 099/053,375
PRIOR APPLICATION NUMBER: 099/053,375
PRIOR FILING DATE: 1998-03-31
NUMBER OF SEQ ID NOS: 1193
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 724
                                                                                                                                          RESULT 7
US-09-440-302B-724
Sequence 724, Application US/09440302B
GENERAL INFORMATION:
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TGTACC	TGAAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCA	2041	Qy
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	. TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGACGACCACTGTTGGTGACCACACACA	9	₽ ₽
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GCA	CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCT 		Qy Db
AGG	_ CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAG 	ω ω	Qy Db
AGA AGA	AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCATGCCCCATTGAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCATGCGCATGCTGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT	1741 1741	Qy Db
AG HAG	AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAAA(1681 1681	Qy Db
d – d	TCACCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATU	1621 1621	Qy Db
\$ - \$	GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	1561 1561	Qу Db
8-8	CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	1501 1501	Qy Db
32 I 32	ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTG	1441 1441	Qу
ద – ద	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG 	1381 1381	ДУ
S = S	GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATC	1321 1321	Qy db
H — H	TGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGC	1261 1261	Qу
ი — ი	AACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	1201 1201	Qу
ର – ର	ATGGCCGTGACCCTGACCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATG	1141 1141	Qy Db
A-A	ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCC	081 081	Qу
ര് — ര്	TGCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATC	1021 1021	Qy Db
35 – 35 - 35	TGCTGGCTACCA TGCTGGCTACCA	961 961	QУ

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1 ATCCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGCAGFT 3180	AGCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCGAG	AGCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCGAGG 312	1 CCGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTGA 3060 	1 CCTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCACA 3000	CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 294	AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAAGGAGTTCCCGTCCCTGCGGGTGT 288	AAGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGA 2820 	_ CGGACATCACCACACCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAG 2760 	ACTGGGTCAGTGACAAGAGGCTGCCCCCCTGCTCACTCAGCCAGGCCCTCACCTACCT	TGGATGGCCCCACCCACCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGCT 2640	ACCTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGG 2580	CCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAGC 2520	TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCCA 2460	TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTCG 2340	GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA 2280 	AGCTCACCCGGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCT 2220	CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC 2160	

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; ORGANISM: homo sapiens
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APPLICANT: Lukashev, Matvey
TITLE OF INVENTION: Human Cardiovascular Array
FILE REFERENCE: CLON-006CIP10
CURRENT APPLICATION NUMBER: US/09/442,589B
CURRENT FILING DATE: 1999-11-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 758, Application US/09442589B GENERAL INFORMATION:
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PRIOR FILING DATE: 1998-03-31
NUMBER OF SEQ ID NOS: 1194
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                                                     GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG
                                                                   GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG
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GGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT	1 CTGCT	288 288	Qy Db
CAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTG	17 -	œ	DЬ
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CCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGA 	1 AAGAG 1 AAGAG	276 276	Qy Db
ATCACCACACCCCACACCCAGCTGCTGCTCCTCCAAAAGCTGGCCCAGGTGGCCACAG 	1 CGGAC	270	Дb
TCAGTGACAAGAGGCTGCCCCCCTGCTCAGCCCAGGCCCTCCACCTCACCTCAGCCCAGGCCCTCCCCACCTCCCACACA	ACTG	64	Db
GTCAGTGACAAGAGGCTGCCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCCC	1 ACTGG	64	Qy
GCCCCACACCCCAGCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCCAGC	g -	258	DЬ
GGCCCACACCCCACCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGCT	1 TGGAT	258	Qy
CCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTG	1 ACCTT	52	DЬ
GGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGC	1 ACCT	2	Qy
CAAGGCCTGAACTACCTGCCGGGGGAG	1 CCATC	246	Db
TGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACT	CCAT	2461	QУ
AAAGTCCGACATCCAGCCGTGCC	LIGITO	240	Db
CATGAGGCTCAAATCTCGGCAGAATCTAC	TGTT	2401	Qy
GACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	TGCAG	4	Db X
ACTCAGAGATGCATTTAGACTAAAAGCCCTCAGGAAGATGCATGC	TOO B	۳	
ATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCGCACCACTACAGGCTGGATCACGACCTACAGGCTGGGACCTGCAAGGCTGGACCTGCAAGGCTGGGACCTGCAAGGCTGGGACCTGCAAGGCTGGACCTGGACCACCTACAGGCTGGCACCTGCAAGGCTGGACCTGGACCACCACTACAGGCTGGCACCTGGACCACCACTACAGGCTGGCACCTGGACCACCACTACAGGCTGGCACCTGCACCACTACAGGCTGGCACCTGGACCTGCACCACTACAGGCTGGCACCTGCACCACCTACAGGCTGGCACCACCACCTACAGGCTGGCACCTACAGGCTGGCACCTACAGGCTGCACCACAGGCTGCACCACAGGACCTACAGGCTGCACACAGGCTACAGGCTGCACACAGGCTGCACACAGGCTGCACACAGGCTGCACACAGACACACAC	TTCAG	2281 2281	Qy Db
TGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA	GGC	2221	Дb
GTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA 2	GGGCC	2221	Qy
CCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGC	AGCTC	2161	Db
CCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCT 2	GCIC	2161	Qy
CTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGGCCTCT	CTCGG	2101	Db
TCTGCGCCTTTGCTC	TCGG	2101	Qy
AGCTCAACAACAAATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGTAC	TGAAAG	2041	Db
AGCTCAACAAC	GAAA	2041	Qy
AATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCATG	GITT	1981	DЪ
GCAATGGAGACTGCCCTGGCAATGGAGAAAACTGAAGAAATCGCTCTTCATGC 2	CGTTTG	1981	Qy
GTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGTGACCAGT	GP -	1921	DЪ
AGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGTGACCAGTA	GGAT	1921	Qy
CTGGGACCTGGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGC	CGCTGG		Db
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                                 AGACAAAATCTTAAATGCCAGGCCTGGCGAGTGGGTGAAAGATGGAACTTGCTGCTGAGT
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APPLICANT: Nicholas M. Dean
APPLICANT: Lex M. Cowsert
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NUMBER OF SEQ ID NOS:
SEQ ID NO 10
LENGTH: 4145
TYPE: DNA
ORGANISM: Mus musculus
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GENERAL INFORMATION:
APPLICANT: C. Frank Bennett
APPLICANT: Nicholas M. Dean
APPLICANT: Lex M. Cowsert
FILE OF INVENTION:
FILE REFERENCE: RTS-0066
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1440 1440	381 TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG 	Оу 1: Db 1:	
1380 1380	321 GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCC		
1320 1320	261 TGGCCAACATGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT	Qy 1;	
1260 1260	201 AACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	Oy 12 Db 12	
1200 1200	41 ATGCCCTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG	0 1	
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02	61 ATGGCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCA	99	
960	01 GTTACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCAGCGGAGTG	9 9 9	
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840 840	1 AGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTCT 	y 7 b 7	
780 780	21 AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC ;	7 7	
720	61 GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG 7 		
660	1 AGCCTACCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACG	Qу б ББ б	
600	41 CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA 6	Qy 5,	
540	81 GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT 5	Qy 48 Db 48	
180	21 TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA 4	Qy 4:	
120	61 AGCAGAATGAGTCCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGG 4	Qy 30	

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APPLICANT: NYCE, Jonathan W.
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REFERENCE/DOCKET NUMBER: EPI-0067191b TELECOMMUNICATION INFORMATION:
                                                                   APPLICATION NUMBER: 60/127,958 FILING DATE: 1998-08-03 ATTORNEY/AGENT INFORMATION:
                                                                                                                      PRIOR APPLICATION DATA:
                                                                                                                                                                                         CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: LOW ADENOSINE ANTI-SENSE OLIGONUCLEOTIDE COMPOSITIONS, KIT & METHOD FOR TREATMENT OF AIRWAY DISORDERS ASSOCIATED WITH
                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
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                              NAME: Amzel, Viviana REGISTRATION NUMBER: 30,930
                                                                                                                                                                                                         MEDIUM TYPE: CD-R
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: N/A
                                                                                                                                                                                                                                                                                                                                 STATE: NJ
                                                                                                                                                                                                                                                                                                                                               CITY: Cranbury
                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC STREET: 7 Clarke Drive
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INFORMATION FOR SEQ ID NO: 2507:
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841 TCGATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGC 900
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                         AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC
                                                                                                                                 GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG
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TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
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1980	1921 TGGATAAGTACAGGCTGAGCTGCCTGGAGGAAGGAACGGCTGCTGTTGGTGACCAGTA	Qy
1920 1920	1861 CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA	Qy Db
1860 1860	1801 CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAGG	Qy Db
1800	1741 AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAGA	Оу
1740 1740	1681 AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAGAG	Qy Db
1680 1680	1621 TCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATC	Qу
1620 1620	1561 GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	Qy Db
1560 1560	1501 CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	ОУ
	1441 ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA 	Оу
1440 1440	1381 TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG 	Qу
1380 1380	1321 GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCC	Qy Db
1320 1320	1261 TGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT :	Qу
1260 1260	1201 AACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	ОУ
1200 1200	1141 ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG	Фр
1140 1140	1081 ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA 1	Qy Db
1080 1080	1021 TGCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCG 1	Qy Db
1020 1020	961 ATGGCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCA	Qу
960	901 GTTACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCCAGCGGAGTG 9 	Qy Db
900		Db

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	GCCTGA 3	3001	Db
060	CGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTGA 3	3001	Qy
0		2941	Db
0	CTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCACA 3	9	Qy
94	CTGCTGGCTTCCTGCTTTCCCAGGTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 2	œ	Db
94	TGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT	8	Qy
88	AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCCGTCCCTGCGGGTGT 2	2821	Db
30 30	GTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT	2821	Qy
82	AAGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGA 2	~	Db
œ	AGAGCCTGAGAGACAGAGGCCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGA	~	. Qy
76	CGGACATCACCACACCCCCAACCCAGCTGCTCCTAAAAGCTGGCCCAGGTGGCCACAG 2	2701	Db
76	GGACATCACCACACCCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAG	2701	Qу
7	ACTGGGTCAGTGACAAGAGGCTGCCCCCCCTCACTCAGCCAGGCCCTCACCTCACC	2641	ДЪ
70	CTGGGTCAGTGACAAGAGGCTGCCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCCC	2641	Qy
64	TGGATGGCCCACACCCCACCAGCAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGCT	2581	Db
64	GGATGGCCCCACCCCACCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGCT	2581	Qy
G	ACCTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGC	2521	Db
2580	CTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGG	5	Qy
52	CCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAGC	2461	Db
	CATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAGC	2461	Qy
46	TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCGGTGCCA	2401	. Db
7	GTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCCA	2401	Ωу
4	TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	2341	, Db
40	GCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	2341	Qy
34	TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTCG	2281	Db
ώ 4	TCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCGCACCACTACAGGCTCG	2281	Qy
28	GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA	2221	Дb
N	GGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCAC	2221	Qy
22		2161	Db
2	GCTCACCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGC	2161	Qy
16	CTCGGTTCTGCGCCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC	2103	Db
16	TCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCT	2101	Qy
10	TGAAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTGGCCTCCGGCTCCAGCATGTACC	2041	рЬ
0	TGAAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTTGGCCTCGGCTCCAGCATGTAC	2041	Qγ
0.4	CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCATGC	198	Δb
4	GTTTGGCAATGGAGACTGCCCTGGCAATGGAGAGAAACTGAAGAAATCGCTCTTCATG	198:	Qy
1980	TGGATAAGTACAGGCTGAGCTGCCTGGAGGAAGGAACGGCTGCTGTTGGTGGTGACCAGTA	192	ДD

J = J	TTTACATGAATTGCATTTT TTTACATGAATTGCATTTT	4081 4081	ОУ
TGGCC	TGTACAGTTATTTATGCCTCTGTATTTAAAAAACTAACACCCAGTCTGTTCCCCA	4021 4021	Qу
CTTG	GCACCACTTCAAGTGACCACCAGGAGGTGCTATCGCACCACTGTGTATTTAACTGG	3961 3961	Qy Db
GAGT	#WALAMAATUTTAAATGULAGGUTGGCGAGTGGGTGAAAGATGGAACTTGCTGCT 	io i	Db V
TIGG	CACCCTGGATTGATCGGAGCCTCCTCTCTCAAACTGGGGCCTCCCTGGTCCC	, a a	g dd A
ACA ACA	::CAAGTCTTATTTCCTCAAGGTTGCTCCCCARC	7 7	D 49
CAG	CTCTGCATTATCTGAGGTCACAGGGCCTGGGGAGATGGAGGAAAGTGATATCCCC	72	Дb
000	GUTUTGAGGGCCTACAGGAGGGGTTAAAGCTGCGGCACAGAACTTAAGGATGGA 	66	D 49
TCA	TCCTTACGAGGCGAAGAAGGACAGGTGGCGGTGCAGCCCAGCAGCCTGGAGATG	60	Db Q
GTA	ACTATTTCTTTCACCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCT	5 4 4	Db Qy
GAG GAG	CCCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAA	4 4 8	Оy
GIG	TCCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGAACIIIIIIIIII	42	Qy Db
GTG	CCAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGT	3361 3361	Qy Db
AAG AAG	TGGCCCAGAAGGGGTGCTGCATGCGGTGCACACACCCTATTCCCGCCTGCCT	w w	рь рь
GAG	TGGTGTTTGGGTGCCGCCGCCCAGATGAGGACCACATCTACCAGGAGGAGATGCTG 	NN	р р
ACC HILL	TCTGGCAGCA	118	Оу
CAGT	1 ATCCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCG	12	Qy Db
CGAG	1 AGCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCC 	0 0	Qy Db

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4141 TAATC 4145

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APPLICANT: Lex M. Cowsert
TITLE OF INVENTION: ANTISENSE MODULATION OF INDUCIBLE NITRIC
FILE REFERENCE: RTSP-0360
CURRENT APPLICATION NUMBER: US/10/182,049
CURRENT FILING DATE: 2002-07-27
PRIOR APPLICATION NUMBER: 09/490,208
PRIOR APPLICATION NUMBER: 09/490,208
PRIOR FILING DATE: 2000-01-24
NUMBER OF SEQ ID NOS: 182
SEQ ID NO 3
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Best Local
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ORGANISM: Homo sapiens
FEATURE:
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LOCATION: (207)...(3668)
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                                                     CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC
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CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCCAGGGACA
             CCAAATCTTGCCTGGGGTCCATTATGACTCCCCAAAAGTTTGACCAGAGGACCCAGGGACA 600
                                                                                                              TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA
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AGCTGTGCCTTCAACCCCAAGGTTGTCTGCA 1920 	1 CGCTGGCCTGGGACCTGGGGGCCTTATTCAG	186	Db dg
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GTGCTCTTTGCCTGTATGCTGATGCGCAAGA 1800 	- AVATTCCATTGAAAGTCTTGGTCAAAGCTGT	174	Db 43
AGGACGAGAA	1 AGGTAGAGGCCTGGAAAACCCATGTCTGGCA	. 68	g Db

ดตั	TAGCACCCTGGATTGATCGGAGCCTCCTCTCAAACTGGGGCCTCCCTGGTCCCTTG	84	Qy Db	
AA AA	CTCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAAC	3781 3781	Qy Db	
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– ຄັ	CCCACACCCTGAAGCAGCTGGTGGCCGACGCTGAAATTGAATGAGGAGCAGGTCGAG	4	Qy	
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ద	GCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCC	306	Qy	
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13	TGCTGGGATCACACCACACACACACACACACACACACACA	294	0 5	
- Ç	1 CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCAGCTCCATCAG	9 00	P Oy	
ξ <u> </u>	AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGT	282	Db	
a	TTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGT	282	Qy	
GA	1 AAGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCCAGCCCTCAGAGTACAGCAAGTG	276	_ Db	

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US-10-182-049-10
Sequence 10, App
GENERAL INFORMA
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APPLICANT: Lex M. Cowsert
TITLE OF INVENTION: ANTISENSE MODULATION OF INI
FILE REFERENCE: RTSP-0360
CURRENT APPLICATION NUMBER: US/10/182,049
CURRENT FILING DATE: 2002-07-27
PRIOR APPLICATION NUMBER: 09/490,208
PRIOR PILING DATE: 2000-01-24
NUMBER OF SEQ ID NOS: 182
SEQ ID NO 10
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; MAME/KEY: mRNA
; LCCATION: (1)...(4110)
US-10-182-049-10
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Best Local Similarity
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                                                      CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC
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ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG
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                                                                                    TGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGCCT
                                                                                                         TGGCCAACATGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT
                                                                                                                              AACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCAG
                                                                                                                                                                         ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG
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CONTRAGATCAACATTGCTGTGATCATAGTTTCAGAAGCAGI	TGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGC	, Qy
1441 ACCAGGCTIGTGGTTGAGATCAACATTGCTGTGATAGTTTTCAGAAGCA 2511111111111111111111111111111111111	461 CCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCG	dd Vo
141 ACCAGGCIGTGAGATCAACATTGCTGTTGATCTTTCAGAAGCA 1501 CCATCATGGACCACCACTCGGCTGCAACTTGCTGTTCAGAAGCA 1501 CCATCATGGACCACCACTCGGCTGCAGAACTTGCTGTTCAGAAGCACACTTGCTTTTCAGAAGCACACTTGCTGGATTGATT	401 TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCC	ap Vo
1441 ACCAGGCTGTGCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAA b 1441 ACCAGGCTGTGGTTGAGATCAACATTGCTTGTGATCCATAGTTTTCAGAAGCAA b 1461 ACCAGGCTGTGGTGAGATCAACATTGCTTGAACCATAGTTTTCAGAAGCAA b 1501 CCATCATGGACCACCACCACCAGGAATCACATTGCTTGAACCATAGTTTTCAGAAGCA b 1501 CCATCATGGACCACCACCACCAGGAATCCATAGTTTCAGAAGAAT b 1501 CCATCATGGACCACCACCACCAGGAATCCTTCAGAAATTACATTGCATGCA	341 TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	Dt. Cy
QY 1441 ACCAGGCTGTCGTTGGGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAACATGCTTTTCAGAGCAACATGCTTTTCAGAAGCAACATGCTTTTCAGAACAACATGCTTTTCAGAAGCAACATGCTTTTCAGAACAACATGCTTTTCAGAACAACATGCTTTTCAGAACAACATGCTTTTCAGAACAACATGCTTTTCAGAACAACATGCTTTTCAGAACAACATGCTTTTCAGAACAACAACATGCTTTTCAGAACAACAACATGCTTTTCAGAACAACAACAACAACAACAACAACAACAACAACAACA	281 TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCGCACCACTAC 	p 0
QY 1441 ACCAGGUTGTGAGATCAACATTGCTTGATTCATAGTTTTCAGAAGCAA Db 1441 ACCAGGUTGTGATGATGATTCAATAGTTTTCAGAAGCAA QY 1501 CCATCATGGAACCACCTCGGCTGCAGAATCCTTCATGATTCATAAATTCCAGAAGTA QY 1501 CCATCATGGAACCACCACTCGGCTGCAGAATCCTTCATGATACATAGTTTTCAGAAGCAA QY 1501 CCATCATGGAACCACCACTCGGCTGCAGAATCCTTCATAGTATACATGCATAGT Db 1501 CCATCATGGAACCACCACCACCTCGGCTGCAGAATCCTTCATAGTATACATAC	221 GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAAC 	F 6
1441 ACCAGGCTGTTGAGATCAACATTGCTTGATCATAGTTTTCAGAAGCAGATCATAGTTTTCAGAAGCAGATCATAGTTTTCAGAAGCAGATCATAGTTTTCAGAAGCAGATCATAGTTTTCAGAAGCAGATCATAGTTTTCAGAAGCAGATCAGATCATAGTTTTCAGAAGCAGAACAAATTGCTTGATGATCATAGTTTTCAGAAGCAGAATCATAGTTTTCAGAAGCAGAATCATAGTTTTCAGAAGCAGAATCATAGTTTTCAGAAGCAGAATCATAGTTTTCAGAAGCAGAATCATAGATCATTGAAGCAACACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAAGCAGAATCCTTCATGAAGTACATGCAGAATCATTGAAAGTACATGCAGAATCATTCAT	2161 AGCTCACCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGAGGACGCCTTCC 	P 9
1441 ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTCAGAAGCAGG b 1441 ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTCAGAAGCAGG b 1441 ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGG y 1501 CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATC	2101 CTCGGTTCTGCCCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGC	פו עם י
1441 ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGG	2041 TGAAAGACTCAACAAATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCIIIIIIIIII	ם פ
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1441 ACCAGGCTGTCGTTGAGATCAACATTGCTGTAGTTGTAGTATGTTTTCAGAAGCAGG	1921 TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGT	
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CAG 36	TTCCTTACGAGGCGAAGAAGGACAGGGTGGCGGTGCAGCCCAGCCAG	3601	Qy
TAT	TTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTG	3541	рb
⋗	CTATTTCTTTCAGCTCAAGAGCCCAGAAGCCGCTATCACGAAGATATCTTCGGTGCTG	3541	Qy
AGG H H H	CCCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGGTCG	3481	Db 45
TGG	CCACAAGGAGCCAGCCACTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACG	4.	B B
TG	CCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACG	3421	Qy
TGC	TTCAGGACATCCTGCGGCAGCAGCTGCCAGCGAGGTGCTCCGTG	3361	Db
īG	CAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTG	3361	Qy
8=	GGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGCCTGCCT	3301	Db
`>	GGCCCAGAAGGGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGCCTGCCT	3301	Qy
AG =	TGGTGTTTGGGTGCCGCCGACATGAGGACCACATCTACCAGGAGGAGATGCTGG	3241	Db
AG	GGTGTTTTGGGTGCCGCCCCCAGATGAGGACCACATCTACCAGGAGGAGGATGCTGG	3241	Qy
CCI	CTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAAGGCCGCATGA	3181	Db
S	TGGCAGCAACGGCTCCATGACTCCCAGCAAGGGAGTGCGGGGAGGCCGCATGA	3181	Qy
GT =	CCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGC	3121	DЪ
ົດ	TCCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGC	3121	Qy
	AGCCCCAAGACCCAGTGCCCTTGCTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCG	3061	Db
Þ	GCCCCAAGACCCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCC	3061	Qy
GE I	CA =	3001	Db
	CGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGC	3001	Qy
CAC		2941	Db
≶	CTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTAC	2941	Qy
AGC		2883	Db
G)	CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATC	2881	Qy
GTG	AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGG	2821	Db
H.	AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGG	2821	Qy
TGG	- AAGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCCAGCCCTCAGAGTACAGCAAG	2761	Db
G	GAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAG	276	Qy
ACA		270	Db
Ď.	GGACATCACCACACCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCC	270	Qy
100	GACAAGAGGCTGCCCCCCTGCTCACTCAGCCAGGCCCTCACCTAC	264	Db
C	CTGGGTCAGTGACAAGAGGCTGCCCCCCTGCTCACCTCAGCCAGGCCCTCACCTAC	264	Qy
AGC	T TGGATGGCCCACACCCCACACAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGC	258	Db Q
GTG	ACCTTGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGA	52	g Db
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Sequence 3017, Application US/09543679A

GENERAL INFORMATION:
APPLICANT: NYCE, Jonathan W.
APPLICANT: NYCE, JONATHAN W.
TITLE OF INVENTION: LOW ADEMOSITIONS, KIT & METHOD FOR TREATMENT COMPOSITIONS, KIT & ASSOCIATED WITH
OF AIRWAY DISORDERS ASSOCIATED WITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3721 GCTCTGCATTATCTGAGGTCACAGGGCCTGGGGAGATGGAGGAAAGTGATATCCCCCCAGC 3780
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                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTACAGTTATTTATGCCTCTGTATTTAAAAAACTAACACCCAGTCTGTTCCCCCATGGCC
                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
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NAME: AMZel, Viviana NAME: AMZel, Viviana REGISTRATION NUMBER: 30,930
REFERENCE/DOCKET NUMBER: EPI-0067191b
TELECOMMUNICATION INFORMATION:
                                                                        APPLICATION NUMBER: 60/127,958
FILING DATE: 1998-08-03
ATTORNEY/AGENT INFORMATION:
                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                   APPLICATION NUMBER: US/09/543,679A FILING DATE: 13-APT-2000 CLASSIFICATION: UNKNOWN
                                                                                                                                                                                                                            COMPUTER: IBM Compatible OPERATING SYSTEM: DOS SOFTWARE: N/A
                                                                                                                                                                                                                                                                                        MEDIUM TYPE: CD-R
                                                                                                                                                                                                                                                                                                                             ZIP: 08512
                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                 STATE: NJ
                                                                                                                                                                                                                                                                                                                                                                                     CITY: Cranbury
                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 7 Clarke Drive
                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC
                                                                                                                                                                                                                                                                                                                                                   USA
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TYPE: nucleic acid
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                                                                                                                                                                   GCACCACTTCAAGTGACCACCAGGAGGTGCTATCGCACCACTGTGTATTTAACTGCCTTG 4020
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                                                                                                                                                                                                                                   AGACAAAATCTTAAATGCCAGGCCTGGCGAGTGGGTGAAAGATGGAACTTGCTGCTGAGT 3960
                                                                TGTACAGTTATTTATGCCTCTGTATTTAAAAAAACTAACACCCAGTCTGTTCCCCCATGGCC
                                                                                   TGTACAGTTATTTATGCCTCTGTATTTAAAAAACTAACACCCAGTCTGTTCCCCATGGCC 4080
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RESULT 15
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                                                                                                                                                                                                                                                                                                                                                     Matches 4145;
                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
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INFORMATION FOR SEQ ID NO: 2509:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4141 TAATC 4145
                                                                                                                                                                                                                                                                        1292 CTGCTTTAAAATCTCTCGGCCACCTTTGATGAGGGGACTGGGCAGTTCTAGACAGTCCCG 1351
                                                                                                                                                                                                     1352
                                                                                                                          241 AATTCCACCAGTATGCAATGAATGGGGAAAAAGACATCAACAACAATGTGGAGAAAGCCC 300
                                                                                                                                                                                                                                      61 AAGTTCTCAAGGCACAGGTCTCTTCCTGGTTTGACTGTCCTTACCCCGGGGAGGCAGTGC 120
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APPLICANT: NYCE, JONATHAN W.
TITLE OF INVENTION: LOW ADENOSINE ANTI-SENSE OLIGONUCLEOTIDE,
COMPOSITIONS, KIT & METHOD FOR TREATMENT
COMPOSITIONS, KIT & ASSOCIATED WITH
BRONCHOCONSTRICTION, LUNG INFLAMMATION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 3111
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/127,958 FILING DATE: 1998-08-03 ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: 609-409-3035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                        GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA 240
                                                                                                                                                                                                   COUNTRY: USA
ZIP: 08512
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC STREET: 7 Clarke Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: UNKNOWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM Compatible
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Amzel, Viviana REGISTRATION NUMBER: 30,930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/09/543,679A FILING-DATE: 13-Apr-2000
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2552 TGGCCAACATGCTGGAGTGGGCGTGGAGTTCCCAGGGTGCCCTTCAATGGCT 2611	DB 43
492 ACATTCCAAATACGATGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	_
CAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	
1141 ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG 1200	ОУ
372 ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA 243	Db
81 ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA 11	Qy
1021 TGCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCG 1080	סט
52 ATGGCAAGCACCGACTTCCGGGTGTGGAATGCTCAGCTATCCGCTATGCTGGCTACCAGA 23	ρb
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	Db
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72 AGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGCATCCAGTGGTCCAACCTGCAGGTC) B
781 AGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGT	Qy
721 AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC 780	• Db
152 GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG 2	ъ
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12 TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGGCA 17	Q E
421 TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAA	oy
1652 AGCAGAATGAGTCCCCGCAGCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGG 1711	Db
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ດ – ດ	TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTC	3572	Дb
> - >	GGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCAC 	51	Оу
H - H	AGCTCACCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGC	4 P	Db
$\tilde{S} - \tilde{S}$	CGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCT 	ت س	Дb
ద드ద	GAAAGAGCTCAACAACAACATCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGTAC 	ωο	Qу
8-8	CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCATG	1981 3272	Дb
F-F	GGATAAGI	21	рр
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മ – ഒ	CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAG	09	Qy Db
.a − a	- AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTTGCCTGTATGCTGATGCGCAA 	03	Qу
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$\Theta = \Theta$	TCACCCCGTGTTTCACCAGGAGATGCTGAACTAGGTCCTGTCCCCTTTCTACTACTAT	1621 2912	Оy
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5-5	CCATCATGGACCACCACT	.50	Qy Db
3 – 3	1 ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTG	73	ОУ
5-5	1 TGGAGGAAGTGGGCAGGAGAATGGGGCTTGGAAACGCACAAGCTGGCCTCGCTCTGGAA 	138 267	Qy Db

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3600	ACTATTTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTGTAT	5	Qy
4831	GCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGGTCGA	4772	Дb
4	CCACACCCTGAAGCAGCTGGTGGCTGCCAAG	4	Qy
4771	AGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACGTG	4712	Дb
3480	CCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCC	4	Qy
3420 4711	ATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCG	3361 4652	Qy
4651	GGGGTGCTGCATGCGGTGCACACACACCTATTCCCGCCTGCCT	σ ω	дь Оу
59	GGTGTTTGGGTGCCGCCCAGATGAGGACCACATCTACCAGGAGGAGAATGTC	5	Дb
3300	GGTGTTTGGGTGCCCCCCCAGATGAGGACCACATCTACCAGGAGGAGATGCTGGAGA	N	Qу
3240 4531	AACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGAGGCCGCATGACCT	4	Db Qy
47	ATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGCAGTT	4412	8
18	CCCTCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGCAGTT	- ,	VO V
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35	GCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTGA	\sim	Db
3060	CGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACACATGGCTCAACAGCCTGA	_	Qy
3000 4291	GAGATCCACCTGACTGTGGCCGTGGTCACCTACCACA	2941 4232	д _у
2940 4231	CTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 	2881 4172	р У
2880 4171	CTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 	2821 4112	Qу
2820 4111	GCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAC 	2761 4052	Qу
2760 4051	ZAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAG 	2701 3992	Qу Дъ
2700 3991	ACAAGAGGCTGCCCCCTGCTCACTCAGCCAGGCCCTCACCTACT(2641 3932	Qy Db
2640 3931	GGATGGCCCACACCCCACCAGACAGTGCGCCTGGAGGACCTGGATGAGAC 	2581 3872	Оу Дъ
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                                                                                                                                              GCTCTGCATTATCTGAGGTCACAGGGCCTGGGGAGATGGAGGAAAGTGATATCCCCCAGC 3780
                                                                                                                                                                                                                                     CGCTCTGAGGGCCTACAGGAGGGGTTAAAGCTGCCGGCACAGAACTTAAGGATGGAGCCA 3720
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                           TAATC 4145
                                                         TGTACAGTTATTTATGCCTCTGTATTTAAAAAAACTAACACCCAGTCTGTTCCCCCATGGCC
                                                                 TGTACAGTTATTTATGCCTCTGTATTTAAAAAACTAACACCCAGTCTGTTCCCCATGGCC
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Search completed: March 14, Job time: 8519 secs 2003, 15:55:55

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Result
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Perfect score:
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Maximum DB seq length: 2000000000
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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2: /cgn2_6/ptodata/2/pna/US06_NEW_COMB.seq:*

3: /cgn2_6/ptodata/2/pna/US09_NEW_COMB.seq:*

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APPLICANT: Charles, Ian G.

APPLICANT: Xu, Weiming
APPLICANT: Liu, Lizhi
APPLICANT: Liu, Lizhi
APPLICANT: Liu, Lizhi
TITLE OF INVENTION: Unducible Screen for Drug Discovery
FILE REFERENCE: HO-P02380US0
CURRENT APPLICATION NUMBER: US/10/049,428
CURRENT FILING DATE: 2000-07-28
PRIOR APPLICATION NUMBER: GB 9918077
PRIOR APPLICATION NUMBER: GB 9918077
PRIOR APPLICATION NUMBER: GB 0016171.1
PRIOR FILING DATE: 1999-07-30
PRIOR FILING DATE: 2000-66-30
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Best Local Similarity
Matches 3647; Conserva
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TYPE: DNA
ORGANISM: Human
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              CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC
                                                                 AATTCCACCAGTATGCAATGAATGAGGGGAAAAAGACATCAACAACAATGTGGAGAAAGCCC
                                                                                                                                      GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA
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                                                 AATTCCACCAGTATGCAATGAATGGGGAAAAAGACATCAACAACAATGTGGAGAAAGCCC
                                                                                                                   GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA
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340 GSTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATC) ב
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- AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC 79	Db
21 AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC 78	Qy
	Db
51 GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG 72	Qy
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01 AGCCTACCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACG 66	Qy
60 CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA 61	Db
41 CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA 60	Qy
00 GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT 55	В
81 GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT 54	Оу
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21 TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGGATCAAAAACTGGGGCA 48	Qy
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61 AGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCTCAGAAACTTCTCG 42	Qγ
320 CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC 379	В

8 – 8	ATGGCCAAGGCCTGAACTACCTGCCGGGGGA 	2461 2480	Qу
TGCC	TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCG	2401 2420	Qy Db
GAAC	TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	23 4 1 2360	Qy Db
01.0 	TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGG	2281 2300	Qy Db
CAC	GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAG	2221 2240	Qy Db
AGC	AGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGC	2161 2180	Qy Db
TCT	CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCC		Qy Db
PAC PAC	. TGAAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTTGGCCTCGGCTCCAGCATGT	2041 2060	Оу ОЪ
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AG AG	TGGATAAGTACAGGCTGAGCTGCCTGGAGGAAGGAACGGCTGCTGTTGGTGGTGACC	94	Qy Db
TGC	CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTC	œ œ	Qy Db
GA — GA	1 CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCA 	82	Qy Db
A - A	1 AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGC 	74	Оу
AG — AG	1 AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGA	70	Qy Db
T-7	1 TCACCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTAC	64	Qy Db
AG AG	1 GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	58	Qy Db
TA	1 CCATCATĞGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAA	150 152	Qу ДЬ
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TTCCTTACGAGGCGAAGAAGGACAGGGTGGCGGTGCAGCCCAGCAGCCTGGAGATGTCA 3659
                                      ACTATTTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTTGGTGCTGTAT 3619
                                                        ACTATTTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTGTAT 3600
                                                                                                              CCCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGGTCGAGG
                                                                                                                                CCCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGGTCGAGG
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APPLICANT: Olson-Munoz, Marilyn C.
APPLICANT: Donald, Glen
TITLE OF INVENTION: Screening Nutraceuticals
FILE REFERENCE: FORS-07289
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Best Local Similarity
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PRIOR FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 8
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CURRENT FILING DATE: 2002-12-10
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ORGANISM: HOMO
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781 AUGCCCCACGCUGCAUUGGGAGGAUCCAGUGGUCCAACCUGCAGGUCUUCGAUGCCCGCA 84	Db
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RESULT 4 US-10-126-052A-312 ; Sequence 312, Application

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PRIOR APPLICATION NUMBER: US 60/290,492
PRIOR APPLICATION NUMBER: US 60/339,245
PRIOR APPLICATION NUMBER: US 60/339,666
PRIOR PILING DATE: 2001-11-09
PRIOR PILING DATE: 2001-11-13
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APPLICANT: Murray, Richard
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer, Compositions and TITLE OF INVENTION: Methods of Screening for Modulators of Lung Cancer FILE REFERENCE: 018501-001530US
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                                                                 TCCAAGACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGTCCAAATCTTGCC
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Pred. No. 0;
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	1752	3 GGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCCAAGAGAAGAGAGATTCCATTGA	169	• Qy
	1692 1680	3 TTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATCAGGTAGAGGCCT	163: 162:	Qγ
	1632 1620	3 GCTGCCCGGCAGACTGGATTTGGCTGGTGCCCCCATGTCTGGGAGCATCACCCCCGTGT 	157: 156:	Дb
	1572 1560	3 ACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	151: 150:	Qу
	1512 1500	3 TIGAGAICAACATIGCTGTGAICCATAGTTITCAGAAGCAGAATGTGACCATCAIGGACC	145 144	ОУ
	1452 1440	3 GCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAGACCAGGCTGTCG 	139 138	Дy
	1392 1380	3 CAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCCTGGAGGAAGTGG 	133 132	Db Qy
	1332 1320	3 TGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCTGGTACATGGGCA	127 126	Db Oy
	1272 1260	3 ACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	121 120	Db Qy
	1212 1200	3 CTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGGAACATCCCAAAT 	115 114	Qу
	1152 1140	33 AGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCAATGGCCGTGACC 	109 108	рь
	1092	33 GCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCGACCTGGGCTGGA 	103 102	Db Qy
	1032	73 ACTTCCGGGTGTGGAATGCTCAGCTCATCCGCTATGCTGGCTACCAGATGCCAGATGGCA 	97 96	DP GA
,	972	L3 ACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCAGCGGAGTGATGGCAAGCACG 	91 90	Оу
	912	33 GCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGCGTTACTCCACCA 	8 4 5 8 4 5	Qy da
	852	33 ATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTCTTCGATGCCCGCA 	79 78	Оу
	792 780	33 CAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGCAGGCCTGGCGCA 	73 72	Qy db
	732	73 AGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGGAGATAGAAACAA 	67	Qy dd
	660	CAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACGGCTCCTTCAAAG	61	Db dq

73 GACAGAGGCTGGAGGCCCTGTG
Qy 2713 CACCCCCAACCCAGCTGCTGCTC
Qy 2653 ACAAGAGGCTGCCCCCTGCTCA
Oy 2593 CACCCCACCAGACAGTGCGCCTG
Qy 2533 GCCCAGGCAACCAGCCGGCCCTGG
Qy 2473 AACTCTCCTGTGAGGATGGCCAA
Qy 2413 GGCTCAAATCTCGGCAGAATCTA
Qy 2353 AGCCTTTGGACCTCAGCAAAGCC
Qy 2293 AGCTCTACACCTCCAATGTGACC
Qy 2233 CCTTCAAGGCAGCCTGTGAGACG
Qy 2173 TGGGAGAAGGGGATGAGCTCAGT
y 2113 CCTTTGCTCATGACATTGATCAG
Qy 2053 ACAACAAATTCAGGTACGCTGTG
Qy 1993 GAGACTGCCCTGGCAATGGAGAG
Qy 1933 GGCTGAGCTGCCTGGAGGAGGAA
Qy 1873 ACCTGGGGGCCTTATTCAGCTGT
y 1813 GAGTCAGAGTCACCATCCTCTTT
\(\) 1753 AAGTCTTGGTCAAAGCTGTGCTC \\
b 1681 GGAAAACCCATGTCTGGCAGGAC

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                                                                                                   TTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAAGTAGCACCCTGG
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ATTGATCGGAGCCTC
                                                                            TTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAAGTAGCACCCTGG
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Qy Db

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GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative sp.
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 37685
LENGTH: 3984
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; ORGANISM: Homo :
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AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC
                                                                                              AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACG
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                                                                                  AGCCTACCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACG
                                                                                                                                            CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA
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Pred. No. 0;
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T 2940 2968	2881 CTGCTGGCTTCCTGCTTTCCCAGCTGCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT	Qy Db
T 2880 2908	2821 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCGTGCGGGTGT	Qу
A 2820 I A 2848	7	ДУ
G 2760 G 2788	01 CGGACATCACC <i>I</i> 29 TGGACATCACC <i>I</i>	Qу
C 2700 C 2728	41 ACTGGGTCAGTGACAAGAGGCTGCCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCC 	Db Qy
T 2640 T 2668	81 TGGATGGCCCCACACCCCACACCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGC	Оy
G 2580	1. ACCTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTG	Qy Db
C 2520 - C 2548	61 CCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGAG 	Дb
A 2460 A 2488	01 TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATÇCAGCCGTGCC 	DЬ
3G 2400 - 3G 2428	41 TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	Дb
2G 2340 2G 2368	281 TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTC	Дþ
CA 2280 CA 2308	221 GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCAC 	Db
CT 2220 	161 AGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGC	Оу
rC 2160 - rC 2188	101 CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCT 	Qy Db
CC 2100 C 2128		Qy Db
3C 2040 3C 2068	1981 CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCATG 	Qy Db
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RESULT 6
US-09-724-676A-37685
(US-09-724-676A-37685, Application US/09724676A)
(Sequence 37685, Application US/09724676A)
(SENERAL INFORMATION: VARIANTS OF Alternative Splinger LTD
(TITLE OF INVENTION: VARIANTS Of Alternative Splinger Application NUMBER: US/09/724,676A)
(CURRENT APPLICATION NUMBER: US/09/724,676A)
(CURRENT FILING DATE: 2000-11-28)
(NUMBER OF SEQ ID NOS: 97222)
(SOFTWARE: PatentIn version 3.2)
(SEQ ID NO 37685)
(ENCT. N. 3984)
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                                                          TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTCG
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Sequence 37684, Application US/09724676 GENERAL INFORMATION:

APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
CURRENT FILING DATE: 2000-11-28

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RESULT 7
US-09-724-676-37684
Sequence 37684, Ap
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APPLICANT: COmpug
TITLE OF INVENTIO
FILE REFERENCE: 1
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SOFTWARE: PatentIn version 3.2
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LENGTH: 3985
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                      AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC
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 GTTACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCAGCGGAGTG
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2008	TACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGTGACCAGT	194	DЬ
1980	GGATAAGTACAGGCTGAGC	92	Qy
1948	ACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCCAAGGTTGTCTGC	188	ДĎ
1920	GCTGGCCTGGGACCTGGGGGCCTT	186	Qy
1888	GGCGTCCCGAGTCAGAGTCACCATCCTTTTGCGACAGAGACAGGAAAATCAGAG	82	Дb
1860	AATGGCGT	ō	Qy
	ATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAG	176	Dβ
1800	GATTCCATTGAAAGTCTTGGT	74	Qy
1768	CCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAAGA	.70	Db
1740	AGGTAGAGGCCTGGAAAACCCATGTC		Qy
1708	TCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTAT	1649	ДЬ
1680	TCACCCC	1621	Qy
1648	GTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	1589	Db
1620	GGTCCCGTGGGGGCTGCCCGGCAGACTGGGATTTGGCTGGTCCCTCCC	1561	Qy
1588	CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	U	Db
1560	CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATACC	1501	Qy
1528	ACCAGGCTGTCGTTGAGATCAACATTGCTGTGCTCCATAGTTTCCAGAAGCAGAATGTGA		DЪ
1500	ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA	44	Qγ
1468	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCCTCTGGAAAG	4	DЬ
1440	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAAACGCACAAGCTGGCCTCGCTCTGGAAAG	38	Qy
1408	ATCC	w	DЬ
1380	GTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCC	1321	Qy
34	TGGCCAACATGCTTGAGGTGGGGGGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT	2 6	Db 43
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1288	AACATCCCAAATACGACTGCGCTTTCGGGAACTGCAGCTAAAGTGCTACGCCCCCCCC	1201	} Q
22	TGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG	\vdash	DЬ
0	ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG	14	Qy
1168	CCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCC	1109	Db
1140	ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA	1081	Qy
1108	CTGTGCA	1049	Db
080	GCCAGATGGCAGCATCAGAGGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATC	1021	Qy
1048	ATGCCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCA		Db
1020	TGGCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCATCCGCTATGCTGGCTACCAG		QΥ
88		929	Db

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Sequence 37684, Application US/09724676A
GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative spirite REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
SEQ ID NO 37684
LENGTH: 3985
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                                       AGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGG
                                                     AGCAGAATGAGTCCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGG
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840 868	81 AGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTCT	8 7	₽ <i>Q</i>
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                                                                                                                                     GENERAL INFORMATION:
APPLICANT: CARGILL, Michele
APPLICANT: BEGOVICH, Ann
     Query Match
                                                             SEQ ID NO 292
                                                                                                                                                                     Sequence 292, Application US/60443566
                                                                                     CURRENT APPLICATION NUMBER: US/60/443,566
CURRENT FILING DATE: 2003-01-30
                                                                                                            APPLICANT: BEGOVICH, AND TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH TITLE OF INVENTION: RHEUMATOID ARTHRITIS, METHODS OF DETECTION AND FILE REFERENCE: CL001447
                                                                    NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
                             LENGTH: 4131
TYPE: DNA
ORGANISM: Homo sapiens
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                    GCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCGACCTGGGCTGGA
                                                        ACTTCCGGGTGTGGAATGCTCAGCTCATCCGCTATGCTGGCTACCAGATGCCAGATGGCA
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TACGCIGIGITIGGCCTCGGCTCCAGCATGTACCCTCGGTTCTGCG 2112 	ACAACAAATTCAGGTACGCTGTGT	2053 2041
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AGGAGGAACGCTGCTGTTGGTGGTGACCAGTACGTTTGGCAATG 199 	GCTGAGCTGCCTGGAGGAGGAAC 	93 92
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GGCAGGACGAGAAGCGGAGACCCAAGAGAAGAGAGAGATTCCATTGA 17 	GAAAACCCATGTCTGGCAGGACGA 	σ σ
TGAACTACGTCCTGTCCCCTTTCTACTACTATCAGGTAGAGGCCT 169 	ACCAGGAGATGCTGAACTACGT ACCAGGAGATGCTGAACTACGT	1633 1621
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CTGCCAACGTGGAATTCACTCAGCTGTGCATCGACCTGGGCTGGA 1080	TGCCAACG	1021

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Sequence 37686, Application US/09724676
GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative sp
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
SEQ ID NO 37686
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TGCTGAAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGT
                                              GTACGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAGAAACTGAAGAAATGGCTCTTCA
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                            TGAAGCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGGCTTCCACCTCCCCC
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                                                    TGGAGACAAAATCTTAAATGCCAGGCCTGGCAAGTGGGTGAAAGATGGAACTTGCTGCTG
                                                                                                                                                            AGCCTCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAA
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RESULT 11
US-09-724-676A-37686
US-09-724-676A-37686
                                                                                 APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 37686
                                                                                                                                                                                                                                                                                Sequence 37686, Application GENERAL INFORMATION:
                      ORGANISM: Homo sapiens
                                          LENGTH: 4062
TYPE: DNA
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	2158 CTCAGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCA 2217	Qy
	00	Db 43
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	2038 TGCTGAAAGAACTAAACAAATTCAGGTACGCTGTGTTTTGGCCTCCGGCTCCAGCATGT 2097	Db Qy
	1978 GTACGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAAACTGAAGAAATCGCTCTTCA 2037 	Qy Db
	19 18	Qy
-	1858 AGGCGTTGGCCTTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCT 1917	Qy
	1798 AGACAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAG 1857	Qy Db
	1738 GAGAGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCA 1797 	Qy Db
	1678 ATCAGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAA 1737 	Оy
	16 15	Оy
	1558 ACCGGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	Qy Db
	, 1498 TGACCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	ДУ
	7 1438 AAGACCAGGCTGTCGTTGAGATCAACATTGCTGTGATAGTTTTTCAGAAGCAGAATG 1497 	Qy Db
	7 1378 TCCTGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCCGCTCTGGA 1437 	Qy Db
	7 1318 GCTGGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACA 1377	Qy Db
	/ 1258 CAGTGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATG 1317 	Qy Db
	/ 1198 TGGAACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	Qy Db
	/ 1138 CCAATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCA 1197	Db 04
0;	Query Match 55.2%; Score 2287; DB 6; Length 4062; Best Local Similarity 99.6%; Pred. No. 0; Mismatches 2837; Conservative 0; Mismatches 11; Indels 0; Gaps	7 110

2016 CTC-RGCTCCCCCCATGGGCATCCCTCCATGGACCAGGCAGAGGCAGAGGCAAACAGC 2218 GCTGGGCCGTGCAAACCTTCAAGGCAGCCTTGAAGCCTTCAGTGGCCAGAGGCAAACAGC 2218 GCTGGGCCGTGCAAACCTTCAAGGCAGCCTTGAAGCCTTCAGTGGCCAGAGGCAACAGC 218 CTGGGCCGTGCAAACCTTCAAGCCTTTCAAGCCAGCCTGGAAGCCTTGAAGCCTCAAACAGC 218 CCTGGGCCGTGCAAACCTTCAAGCCTTTGAAGCCTGCAAGCAGCCTGCAACAGCCTTGAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCACCTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTTCAAGCCTCAAGCCTCAAGCCTCAAGCCTCAAGCCTCAAGCCTCAAGCCTCAAGCCTCAAACTCCAACCCACCACCACCACCACCACAACTCCAACCCACAACTCCAACCCACAACTCCAACCCACCA
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: TITLE OF INVENTION: Variants of alternative spi
: FILE REFERENCE: 129181.4 Compugen
: CURRENT APPLICATION NUMBER: US/09/724,676
: CURRENT FILING DATE: 2000-11-28
: NUMBER OF SEQ ID NOS: 97222
: SOFTWARE: PatentIn version 3.2
: SEQ ID NO 37688
: LENGTH: 3867
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                           Best Local Similarity
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                             Conservative
                                          42.7%;
                             0;
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Pred. No. 0;
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                                          CTCAGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCA
                                                                                 ACCCTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCT
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                              CTCAGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCA
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APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative spl
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
SEQ ID NO 37688
LENGTH: 3867
TYPE: DNA
ORGANISM: Homo sapiens
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CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
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CCACCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGG

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US-09-724-676A-37687; Sequence 37687, Application; GENERAL INFORMATION:

US/09724676F

APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2

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; ORGANISM: Homo sapiens
US-09-724-676A-37687
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Best Local
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LENGTH: 3868
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1949 TGCTGAAAGAGCTCAACAACTTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGT
                                        1829
          2038 TGCTGAAAGAGCTCAACAAATTCAGGTACGCTGTGTTTTGGCCTCCGGCTCCAGCATGT 2097
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                                                                                                                           GCATGGATAAGTACAGGCTGAGCTGCCTGCAGGAGGAACGGCTGCTGTTGGTGGTGACCA 1888
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                                                                                                                                                                                                                                                                            ATCAGGTAGAGGCCTGGAAAACCCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAA 1737
                                                                                                                                                                    AGACAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAG 1768
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ACAGGCATCGTGCCCTTCCGCA 3177 	18 AGGATCCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAG	Qy 31 Db 30
GCCAGCGCCTTCCACCTCCCCG 3117 	S TGAAGCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCC 	9 0
TGCAGCACATGGCTCAACAGCC 3057 	98 ACACCGAGATGCCAGGGTCCCCTGCACCACGGTGTCTGCA	29
ACTGTGGCCGTGGTCACCTACC 2997 	38 GCTCCTCCCGGGATCACACGCCCACGGAGATCCACCTGACTG	28
AAGCCCAGGTTCTACTCCATCA 2937	*/8 TGTCTGCTGGCTTCCTGATTCCCAGCTCCCCATTCTGAAGC *********************************	
GAGGAGTTCCCGTCCCTGCGGG 2877	118 GGAAGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGG	
CAGCCCTCAGAGTACAGCAAGT 2817 CAGCCCTCAGAGTACAGCAAGT 2728	38 CASAAGAGCCTGAAGAGACAGAGGCTGGAGGCCCTGTGCCAG	2 2
CAAAAGCTGGCCCAGGTGGCCA 2757 CAAAAGCTGGCCCAGGTGGCCA 2668	by CCCGGACATCACCACACCCCAACCCACGCTGCTGCTCCAA) D X
CTCAGCCAGGCCC CTCAGCCAGGCCC	O SCINCTIGGTICAGTICACAAGAGGCTGCCCCCTGCTCACTC	. 5 4
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GGTCCAAGGCATCCTGGAGCGAG 2577 	318 AGCACCTTGGGGTTTFCCCCAGGCAACCAGCCGGCCCTGGTC	
AGGCCTGAACTACCTGCCGGGGG 2517 	458 CCACCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGC	> N N
ACAAAGTCCGACATCCAGCCGTG 2457 	398 ACGTGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAA	, y 2 2
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GTTTGATGTCCGAGGCAAACAGC 2277 	218 GCTGGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTT 	NN
TGGGCAGGAGGACGCCTTCCGCA 2217 	158 CTCAGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGG 	Оу 2 Db 2
GAAGCTGTCCCACCTGGGGGCCT 2157 	098 ACCCTCGGTTCTGCGCCCTTTGCTCATGACATTGATCAGAA	Qy 2 Db 2

GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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Database :
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N_Geneseq_101002:*

1: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1980.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*
3: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1982.DAT:*
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24: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2000.BAT:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

9	8	7	6	5	4	ω	2	_	Result No.
4145	4145	4145	4145	4145	4145	4145	4145	4145	Score
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Query
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21	21	21	21	22	22	21	21	15	i
AAF21436	AAA34820	AAF20942	AAF21450	AAH47966	AAH47959	AAA34818	AAF20940	AAQ66914	ID
Human enzyme-relat	Human adenosine re		Human inducible ni	Mouse inducible ni	Human inducible ni	Human adenosine re	Human inducible ni	Sequence of the cD	Description

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Human spliced tran Human spliced tran Human spliced tran	n genome-c	Probe #19366 used	Human bone marrow	brain e	Human foetal liver	$^{\circ}$		cDNA diffe	adenosine		Human genome-deriv		#5573	bone marrow	brain	#5546 f	foetal	genome-	#19110 used	#1479	bone marrow	brain e	#15462 for	foetal	genome-deri	#6190	n bone marrow	brain e	foetal live	islet induc	an islet induc	3 (Hinos 3/ - untranela	CACH	Je pur	or or or or	Nucleotide sequenc	1	inducible n	inducible n	ible nitric	inducibl	c-oxide-s	Nitric oxide synth

ALIGNMENTS

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RESULT 1
AAQ66914
ID AAQ66914;
XX
AC AAQ66914;
XX
DT 28-DEC-1994 (first entry)
XX
DE Sequence of the cDNA clone for human hepatocyte inducible nitric DE oxide synthase.
XX
XX
XX
Nitric oxide synthase; hepatocyte; hypotensive shock; therapy; ss
XX
XX
OS Homo sapiens.
XX
FH Key
FT CDS
207..3668
FT CDS
207..3668
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PN WO9412645-A.
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Matches 4145
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P-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim
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2820	61 AAGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGA	27	Qy
2760	GGACATCACCACACCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACA	. 27	ַם
2760	01 CGGACATCACCACACCCCCAACCCCGACCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAG	27	Qy
2700	41 ACTGGGTCAGTGACAAGAGGCTGCCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCCC	26 26	Db Qy
64	1 TGGATGGCCCACACCCCACCAGACAGTGCGCCTGGAGGACCTGGATGAGAATGGCAGC	25 25	pb Qy
5 5	1 ACCTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGACGAGC 	2 5	dg Vo
52	1 CCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAG	24	7d 70
46	1 TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCC		Db Qy
2400	1 TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	y 234 b 234	Db 09
2340 2340	11 TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTCG		P 64
2280 2280	1 GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA 	2 2 2	P Q
2220	1 AGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCT	21 21	β 43 δ
2160 2160	1 CTCGGTTCTGCGCCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC	y 210 b 210	Qy
2100 2100	1 TGAAAGAGCTCAACAACAACTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGTACC	20	Db Qy
2040	11 CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCATGC 	· ·	Ωу
1980 1980	1 TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGACGGCTGCTGTTGGTGGTGACCAGTA	•	Db Db
1920 1920	1 CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA	y 186 o 186	B &
1860 1860	1 CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAGG		dq Qy
1800 1800	1 AGATTCCATTGAÀAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAGA	y 174 5 174	DP Vo
1740 1740	1 AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAAGAG	о ·	Qy Db

GTCCCTTGG 3900	1 GTAGCACCCTGGATTGATCGGAGCCTCCTCTCTCAAACTGGGGCCTCCCTG	384	Qy
CTAACA	TCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACC	378	Db
+-3	1 CTCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGAC	378	Qy
TCCCCCAGC 3780 	11 GCTCTGCATTATCTGAGGTCACAGGGCCTGGGGAGATGGAGGAAGTGATAT 	372 372	Qy Db
ATGGAGCCA 3720 ATGGAGCCA 3720	1 CGCTCTGAGGGCCTACAGGAGGGGTTAAAGCTGCCGGCACAGAACTTAAGG 	366 366	Qy Db
AG 366 AG 366	1 TTCCTTACCAGGCGAAGAAGAAGGACGGTGCGGTGCAGCCCAGCAGCCTGG	9 9	Qy Db
0	41 ACTATTTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGG	354	рb
		44	Db ?
GACGTG GTCGAG	1 TCCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGC	342	Ov Ov
GACGT	TCCACAAGGAGCCAGGCCACCTCTATGTTTTGCGGGGATGTGCGCATGGCCC	4	Qy
TCCGTGTGC 3420	CCAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGCG	3361 3361	Db Qy
CTGGCAAGC 3360 CTGGCAAGC 3360	1 TGGCCCAGAAGGGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGCCTGCC	3301 3301	Qy Db
TGCTGGAGA 3300 TGCTGGAGA 3300	1 TGGTGTTTGGGTGCCGCCGCCCAGATGAGGACCACATCTACCAGGAGGAGAT	324 324	Qy Db
GCATGACCT 3240 GCATGACCT 3240	TCTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCC	3181 3181	Qу
CCGCAGTT 3180	1 ATCCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTC	312 312	Qy Db
rccccgAGG 3120 rccccgAGG 3120	1 AGCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCT	3061 3061	Qy Db
ACAGCCTGA 3060 ACAGCCTGA 3060	1 CCGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAAC	3001	Qy Db
CCTACCACA 3000 CTACCACA 3000	CCTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCAC	29 4 1 29 4 1	Qy Db
CATCAGCT 2940	1 CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTC	288: 288:	Qy Db
GCGGGTGT 2880 rgCGGGTGT 2880	1 AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGG 	2821 2821	Qy Db
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oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration;
                                                                                                                                                     The present invention describes low adenosine
                                                                                                                                                                                                                                                                                           Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nусе
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                                                                                                                                                                                                                     Disclosure;
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Matches 4145; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      transmitters, defensins, growth factors, vasoactive peptides and receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease of condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide the process of the process of the pulmonary transplantation of the process of the process of the pulmonary transplantation of the pulmonary transplantation of the process of the pulmonary transplantation of the process of the pulmonary transplantation of the pulmonary trans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4145 BP; 968 A;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expression and or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating an activating peptide factors and transmitters, transcription factors,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nervous system (CNS) and peripheral nervous and non-nervous system receptors, CNS and peripheral nervous and non-nervous system peptide
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	CTAAAGTGGTACGCCCTGCCTGCAG	1201	Дb
2	ACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	1201	Qy
1200	TTGAGGTGGCCATGG	1141	В
1200	TGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGTGTTGAGGTGGCCATGG	14	Qy
1140 1140	ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA :	1081 1081	Qу Db
	CAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATC	021	ДЬ
1080	TGCCAGATGGCAGCATCAGAGGGGAACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCG	21	Qy
1020	GGGTGTGGAATGCTCAGCTCATCCGCTATGCTGGCTACCAGA	19	Dβ
1020	TGGCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCATCCGCTATGCTGGCTACCAGA	61	Qy
6 6	GTTACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCCAGCGGAGTG		D 65
960	GATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACACGTGC	41	р
0	TCGATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGC		Qy
340	GCCTGCCAATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTC	81	Db
340	AGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTCT 8	81	Qy
780	GATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC 7	721 A 721 A	Qy Db
720	CTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAA	ï	뫄
2		661	Qy

Qy	DЬ	Qу	Db	Qy	Dp AA	?	Qy Db	Db	Qy	Db	Qy	Db	Qy	Db	Qy	DЬ	Qy	DЬ	γQ	Db	Qy	Db	Qy	da	Qy	Db 43		D 1	Qy	DЬ	Qy	Db	Qy	Db	Qy
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AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 28	AAGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGA 28	AGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGG	GACATCACCACACCCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCA	GGACATO		MOTOR TOOK OF JUSTICATION OF JUSTICATION OF THE PROPERTY OF TH	TGGATGGCCCCACACCCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGCT 26	TTGGGGTTTGCCCAGCCAGCCAGCCGCCCTGGTCCAAGGCATCCTGGAGCGAGTGG 2	CCTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGG 2	CATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAG	CCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAGC 25	GTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCC	TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGGCACATCCAGCCGTGCCA 246	CATGCCAAGAAC	GCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATC	CAGGCTC	TCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGG	GAGGCAAACAGCAC	GGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGC	CAGC	CTCACCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCI	GGCCTC	TCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCA	TAC	GAAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTTGGCCTCGGCTCCAG	õ	CTTTTCGABATCGAGAATTCCCTCCCCAATGGAGAGAAACTGAAGAAATCGCTCTTCATGC 20	TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGTGACCAGTA 198	GGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGTGACCAGT	CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA 192	GCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGC	CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAGG 186	AATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAG	TGCTCTTTGCCTGTATGCTGATGCGCAAG	GATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGT

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AGACAAAATCTTAAATGCCAGGCCTGGCGAGTGGGTGAAAGATGGAACTTGCTGCTGAGT
                                 GTAGCACCCTGGATTGATCGGAGCCTCCTCTCTCAAACTGGGGCCTCCCTGGTCCCTTGG
                                                    GTAGCACCCTGGATTGATCGGAGCCTCCTCTCTCAAACTGGGGCCTCCCTGGTCCCTTGG
                                                                                                                      CTCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAA
                                                                                                   CTCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCCTTTACTTGACCTCCTAACAA
                                                                                                                                                                     GCTCTGCATTATCTGAGGTCACAGGGCCTGGGGAGATGGAGGAAAGTGATATCCCCCAGC
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Qy 맑 δÃ 망 QY g γ В δõ 망

Дb

Qy

B Ş В δ 뫄 Qy 밁 QΥ Вþ Qy DЬ Qy ДЬ Qy

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fibrosis,

pulmonary disease (

ry hypertension, emphysema, chronic obstructive (COPD), and cancers such as lanksomiss hours

The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchocomstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antialtergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired aliveays, including lung diseases and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic

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RESULT 3
AAA34818
ID AAA3
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                                                                                                                                                                          Disclosure;
                                                                                                                                                                                                        bronchitis, emphysema, respiratory distress syndrome,
                                                                                                                                                                                                                      New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthm respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; copp; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                 WPI; 2000-205971/18
                                                                                                                                                                                                                                                                                                                                              03-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                       03-AUG-1999;
                                                                                                                                                                                                                                                                                                                     (UYEC-) UNIV EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    phosphorothioate; impaired respiration; inflammation; allergy;
allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
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                                                                                                                                                                                                                                                                                                                                                                                                                           WO200009525-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human adenosine receptor related polynucleotide SEQ ID NO:2507
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 adenosine receptor; low adenosine antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4145
                                                                                                                                                                    Page 664-665; 1343pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONS reduces side effects. The A-containing ONS break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 1815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA33992) are specifically claimed ONS from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequences.
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Sequence 4145 BP; 968 A; 1203 C; 1126 G; 848 T; 0 other;

	GCCTGGCGCAATGCCCCACGCTGCATTGGGAAGGATCCAGTGGTCCAACCTGCAGGTCT 840	y 781 AG	ξō.
	NTAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC 780	721	Db
	00	721	Qy
	CCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG 720	661	Db
	GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG 720	661	Qy
	CTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACG 660	601	맜
	AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTTGTCAACCAATATTACG 660	601	γQ
	AATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA 600	541	Дb
	CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCCAGGGACA 600	541	Qy
	GGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT 540	481	Db
	GCGGGATGACTTTCCAAGACACACACACATAAGGCCAAAGGGATTTTAACTTGCAGGT 540	481	Qy
	AGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAAACTGGGGCA 480	421 T	Дb
	CAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA 480	421 T	ρ
	AGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGG 420	361	Дb
	AGCAGAATGAGTCCCCGCGCGCCCCCCGTGGAGACGGGAAAGAAGTCTCCCAGAATCTCTGG 420	361	ρ
	GTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC 360	301	밁
	CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC 360	301	δÕ
	TCCACCAGTATGCAATGAATGGGGGAAAAAGACATCAACAATGTGGAGAAAGCCC 300	241	В
	AATTCCACCAGTATGCAATGAATGGGGAAAAAGGACATCAACAACAATGTGGAGAAAGCCC 300	241	Qy
	ACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA 240	181	멍
	GTGACCTGCTTTGTAAAGCCATAGAGÀTGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA 240	181	Qy
	CAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAA 180	121 AC	밁
	AGCCAGCTGCAAGCCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAA 180	121 AC	Qy
	TTCTCAAGGCACAGGTCTCTTCCTGGTTTGACTGTCCTTACCCCGGGGAGGCAGTGC 120	61 A	Дb
	AGTTCTCAAGGCACAGGTCTCTTCCTGGTTTGACTGTCCTTACCCCGGGGAGGCAGTGC 120	61 A	Qγ
	CTTTAAAATCTCTCGGCCACCTTTGATGAGGGGACTGGGCAGTTCTAGACAGTCCCG 60	1	뫄
	CTGCTTTAAAATCTCTCGGCCACCTTTGATGAGGGGACTGGGCAGTTCTAGACAGTCCCG 60	1 (7	Qγ
0;	100.0%; Score 4145; DB 21; Length 4145; Similarity 100.0%; Pred. No. 0; Conservative 0; Mismatches 0; Indels 0; Gaps 0	Query Match Best Local Matches 414	

TGGCC 4080	TGTACAGTTATTTATGCCTCTGTATTTAAAAAACTAACAGCCAGTCTGTTCCCCA!	4021 4021	Qy Db
			Db
COMPO 100	CACCACTTCAAGTGACCACACACACTCTCTCTCTCTCACTACTCACTC	96	O V
TGAGT 3960	AGACAAAATCTTAAATGCCAGGCCTGGCGAGTGGGTGAAAGATGGAACTTGCTGCT	3901 3901	Дb
CTTGG 3900	TAGCACCCTGGATTGATCGGAGCCTCCTCTCTCAAACTGGGGCCTCCCTGGTCC	00	Db
CTTG	CTCTCAAACTGGGGCCTCCCTGGTCC	3841	Qy
HIIII AACAA 3	CTCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCT	3781	Db
AACA	AAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCT	3781	Qy
11111 CCAGC 378			Db
CC 400 378	CTCTGCATTATCTGAGGTCACAGGGCCTGGGGAGATGGAGGAAAGTGATATTCCC	7	Qy
SAGCCA 3720		99	Db
		3661	0ν
TGTCAG 3660	GAAGGACAGGGTGGCGTGCAGCCCAGCAGCCTGGAGAT	6	Db -
TGTAT 360	TCCTTACGAGGCGAAGAAGAACAGCACGCAGGCGCGCGCG	60	Qy
11111 360		Ú.	Db
	CTATTTCTTTCAGCTCAAGAGCCAGAAAGCTCATCACGAAGATATCTTCCCTCC	G	Qy
11111		48	Db
CGAGG 354	CCCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGCT	3481	Qy
CGTGG 348	TCCACAAGGAGCCA	42	Db
CGTGG 348	CCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGG	3421	Qy
IIIII TGTGC 342		3361	Db
TGTGC 342	CCAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCC	ω	Qy
 CAAGC 336	TGGCCCAGAAGGGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGCCTGCCT	3301	Db
GCAAGC 336	TGGCCCAGAAGGGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGGCCTGCCT	3301	Qy
111111 TGGAGA 330		24	DЬ
TGGAGA 330	. TGGTGTTTGGGTGCCGCCGCCCAGATGAGGACCACATCTACCAGGAGGAGATGC	3241	Qy
24	TCTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCA	3181	Db
TGACCT 324	TCTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCA	3181	Qy
 GCAGTT 318	ATCCCTCCCATCCTTGCATCCTCATCGGCCCTGGCACAGGCATCGTGCCCTTCC	3121	Db
GCAGTT 318	TCCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCC	312:	Qy
 	AGCCCCAAGACCCAGTGCCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCACCTCCACCTTCCACCTTCCACCTCCACCCTCCACCCTCCACCTCACACACACACACACACACACACACACACACACACACACA	90	Дb
CCGAGG 312	GCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCC	90	Qy
HIIIII GCCTGA 306		300	Db
GCCIG	CGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACA	300	Qy

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 Query Match
Best Local Similarity
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                                                                              oligonucleotides are useful for inhibiting the expression of inducible nitric oxide synthase in cells or tissues. In particular, the antisense oligonucleotides are useful for treating diseases or disorders associated with inducible nitric oxide synthase, e.g. diabetes, immunological disorder, cardiovascular disorder, neurological disorder or ischaemia/reperfusion injury. The antisense oligonucleotides are also useful for research and diagnostics. The present sequence is that of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense oligonucleotide; inducible nitric oxide synthase; modulate expression; immunomodulator; antidiabetic; cardiovascular; cardiant; neuroprotective; vasotropic; ischaemia; reperfusion injury; 2'.O-methoxyethyl; phosphorothioate; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human inducible nitric oxide synthase encoding cDNA 1.
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                                                                                                                                                                                                          The invention relates to antisense compounds, especially oligonucleotides, which are targeted to a nucleic acid encoding inducible nitric oxide synthase and which specifically hybridise to and modulate expression of inducible nitric oxide synthase. The antisense compounds
                                                                                                                                                                                 have immunomodulator, antidiabetic, cardiovascular, cardiant, neuroprotective, disorder and vasotropic activity. The antisense
                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides for modulating the expression of inducible nitric oxide synthase in cells or tissues, particularly useful for treating e.g. immunological, cardiovascular or neurolog
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                                          Sequence 4145
                                                                                                                                                                                                                                                                                Example 13; Page 92-97; 144pp; English.
                                                                      human inducible nitric oxide synthase (GenBank accession
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                  TGCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACCTCAGCTGTGCATCG
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т 2220	2161 AGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGC	Qy
C 2160	101 CTCGGTTCTGCGCCTTTGCTCATC	Db
21	2101 CTCGGTTCTGCCCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCT	Qy
C 2100 2100	2041 TGAAAGACTICAACAACAAATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGTAC	문 5
C 204	1981 CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTC	da d
C 2040	1981 CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAAAATCGCTCTTCAT	γQ
98	1921 TGGATAAGTACAAGGCTGAGCTGCCTGGAGGAAGGAACGGCTGCTGTTGGTGATGACCAG	g dg VQ
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192	1861 CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTC	Qy
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A 180	1741 AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAA	Qy
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2 16	1521 TCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTA	0 5
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62	b 1561 GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	DЬ
A 162	1561 GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	Qy
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 4145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               have immunomodulator, antidiabetic, cardiovascular, cardiant, neuroprotective, disorder and vasotropic activity. The antisense oligonucleotides are useful for inhibiting the expression of inducible nitric oxide synthase in cells or tissues. In particular, the antisense oligonucleotides are useful for treating diseases or disorders associated with inducible nitric oxide synthase, e.g. diabetes, immunological disorder, cardiovascular disorder, neurological disorder or ischaemia/reperfusion injury. The antisense oligonucleotides are also useful for research and diagnostics. The present sequence is that of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to antisense compounds, especially oligonucleotides, which are targeted to a nucleic acid encoding inducib nitric oxide synthase and which specifically hybridise to and modulate expression of inducible nitric oxide synthase. The antisense compounds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides for modulating the expression of inducible nitric oxide synthase in cells or tissues, particularly useful for treating e.g. immunological, cardiovascular or neurological cardiovascular o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P-PSDB;
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AGCCAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAA
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ers, or ischaemia
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μ	1 ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG 	1141 1141	Qу ДЪ
μ	1 ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCTGGTCCTGCAGGCCA	108:	Qy Db
	1 TGCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACCTCAGCTGTGCATCG	102:	Qу
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9 9	1 GTTACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCAGCGGAGTG	90:	Qу
io io	1 TCGATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGC	841 841	Qy Db
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V V	1 AGATAGAAACAACAGGAACCTACCAACTGACGGAGATGAGCTCATCTTCGCCACCAACGC 	72: 72:	Qу
~ ~	1 GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG 	66.	Оу
തെ	1 AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTTTTCAACCAATATTACG	60:	DЬ
6 6	1 CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA	541 541	Qу
ഗാഗ	1 GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT 	48	Db Qy
4 4	1 TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA	42	Оу
4 4	1 AGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGG 		Db Qy
ω ω	1 CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTCAGTATCACAACCTCAGCAAGC	30:	Оy
w	1 AATTCCACCAGTATGCAATGAATGGGGAAAAAGACATCAACAACAATGTGGAGAAAGCCC	24	Db

	401	Db
GTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTG	2401	QY
TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	2341	Db
GCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	2341	QY
TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTCG 2340	2281	Db
AGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGC	2281	ФУ
GCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGC	2221	Db
CCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCAC	2221	ОУ
AGCTCACCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCT 2220	2161	Дb
TCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAG	2161	Оу
CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC 2160	2101	Db
TCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGGCCTC	2101	Qy
TCAACAACAAATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATG	2041	ДĎ
GAAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTGGCCCTCGGCTCCAGCATGI	2041	Qy
CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCATGC 2040	1981	dd
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AATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGACA	1801	Оу
GAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAA	1741	Db
ATTCCATTGAAAGTCTTGGTCAAAGCTGTGCCTCTTTGCCTGTATGCTGATGCGC	1741	уо
AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGACGAGGAGGAGGCCCAAGAGAGAG	1681	Db
GGTAGAGGCCTGGAAAACCCCATGTCTGGCAGGACGAGAAGCGGGAGACCCAAGAAGAAG	1681	Qy
TCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATC 1680	1621	ממ
CACCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACT	1621	QY
GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCCTCCCATGTCTCGGAGCA 1620	1561	Db
GTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	1561	Qy
CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	1501	Дb
CATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	1501	Qy
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TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG
                          TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG
                                                    TGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT
                                                                                                                                                                                     AACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCAG
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                                                                                                            TGGCCAACATGCTGGGTGGGGGGGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT
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                                                                                                                                                                      ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG
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Qγ	1441	CAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTG	00
Ф	1441	ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA 15	
γQ	1501	CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	
, 5	, ,	CAICAIGANCACCACICGGCIGCAGAATCCITCAIGAAGTACAIGCAGAAIGAAIACC I	060
Ϋ́	Ü	CCATGTCTGG	20
Db	1561	GTCCCGTGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCC	520
Qy	62	CACCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATC	80
В	1621	CACCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGT	08
Qγ	6	GAGACCCAAGAGAGAGAG	40
Вр	1681	GGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAAGAG	40
Qy	1741	CATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAGA 1	000
Db	1741		
Qy	1801	CGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAG	00
Ф	1801	AATGGCGTCCCGAGTCAGAGTCACCATCCTCTTGCGAC	60
Qγ	1861	TGGCCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGC	20
Ъ	1861	GCTGGCCTGGGACCTGGGGGCCTTAFTCAGCTGTGCCTTCAACCCCCAAGGTTGTCTGCA	
γQ	1921	GGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGTGACCAGTA	080
В	92	AGGCTGAGCTGCCTGGAGGAGCGAACGGCTGCTGGTGGTGACCAGTA 1	080
ΩУ	98	CTTCATO	40
Ф	1981	GTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATC	40
Qy	04	AACAAATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGTACC 2	100
Ъ	2041	AAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTGGCCTCGGCTC	00
Qy	2101	AGAAGCTGTCCCACCTGGG	60
ф	2101	CGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC 2	60
Qy	0	GGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTC	20
В	2161	CTCACCCCGATGGGAGAA	20
Qy	2221	ATGTCCGAGGCAAACAGC	80
В	2	GCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTG	80
Qy	2281	GACCCGCACCACTAC	40
В	2281	TCAGATCCCCAAGCTCTACACCTCCAATGTGACCTG	40
Qy	2341	AGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCATGCAT	00
Ъ	2341	CAGGACTCACAGCCTTTGGACCT	00
Qy	2401	AAAGTCCGACATCCAGCCGTGCCA	60
ЪЬ	4	GTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCCA	
Qy	2461	AACTACCTGCCGGGGGAGC	20
Bb	4	CATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAGC 2	20

3660	TTCCTTACGAGGCGAAGAAGGACAGGGTGGCGGTGCAGCCCAGCAGCCTGGAGATGTCAG	3601	Qy
3600	ACTATTICATTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTGTAT	3541	da
3600	CTATTTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTGTA	3541	Qy
3540	CCACACCCTGAAGCAGCTGGTGGCTG	3481	Db
3540	CACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGGTCGAG	3481	Qy
3480	TCCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCCGGGACGTGG	3421	Db
3480	CCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACGTG	3421	Qy
3420	CAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGC	3361	Db
3420	CAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTG	3361	Qy
36		ω ·	Db
	OGROCAGAAGGGGGTGCTGCATGCATGCAGCACCACATCACCAGCATGCAGTGAGAGAGA	0	٥٧ و
3300	TIGGTGTTTGGGTGCCGCCGCCCAGATGAGGACCACATCTACCAGGAGGAGATGCTGGAGAAAACTCTGCACAAAACAAAAAAAA	3241	Db Qy
3240	CTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGAGGCCGCATGACC	=	Db
3240	TCTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCATGACCT	-ب	Qy
3180	ATCCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGCAGTT	3121	Db
3180	TCCCTCCCATCCTTGCATCCTCATCGGGCCTTGGCACAGGCATCGTGCCCTTCCGCAG	3121	Qy
	AGCCCCAAGACCCAGTGCCCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCGAGG	3061	Db
3120	GCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCGA	3061	Qy
0	CCGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTGA	3001	Db
3060	CGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTG	3001	Qy
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00	CTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCAC	2941	νo
94		œ	. Db
ف	TGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGC	2881	ΩУ
88	HILLIH HI	2821	Db
	GTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTG	2821	Qy
82		76	Db
0 1	AGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTAC	76	QV
76			Db
2760	GGACATCACCACACCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACA	2701	ОУ
70		2641	Db
70	CTGGGTCAGTGACAAGAGGCTGCCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCC	2641	ОУ
64	TGGATGCCCCACACCCCACAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGCCAGCT	2581	Db
64	GGATGGCCCCACACCCACCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGC	2581	Qy
58		52	фd
2580	OCTTOGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTC	2521	Qy

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4141 TAATC 4145
(UYEC-) UNIV EAST CAROLINA (NYCE/) NYCE J W.
                                                                                                              06-APR-1999;
                                                                                                                                                                                       24-MAR-2000; 2000WO-US08020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human low adenosine antisense oligonucleotide #2509.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF20942 standard; DNA; 9513
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Query Match Best Local

100.0%;

Score 4145; Pred. No. 0;

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cc expression and or activity of target polypeptides associated with cling/respiratory disorders and malignancies, such as stimulating and cactivating peptide factors and transmitters, transcription factors, chemokines, endogenously produced specific and non-specific enzymes, chemokines, endogenously produced specific and non-specific enzymes, chemokines, endogenously produced specific and non-specific enzymes, chemokine receptors, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central corvous system (CNS) and peripheral nervous and non-nervous system peptide creceptors, CNS and peripheral nervous and non-nervous system peptide creceptors, binding proteins and malignancy associated proteins. The cantisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction cand/or bronchoconstriction) and/or ling inflammation, allergy(ies) cand/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, callergies, asthma, impeded respiration, respiratory distress syndrome conditions, cystic fibrosis (CP), allergic rhinitis (AR), pulmonary transplantation rejection, pulmonary infections, bronchitis, cand/or cancer. AAF18434 to AAF21543 represent human polynacleotide condition of fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immunosuppressive, antiasthmatic, hypotensive and cytostatic activities The antisense oligonucleotides and (I) can be used to down-regulate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base
Sequence 9513 BP; 2107 A; 2868 C; 2672 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes low adenosine (A) content antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 737-739; 1592pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nyce
                                                                                    fragments and antisense oligonucleotides used in the exemplification of
                                                         present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5312
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; Cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA34820 standard; DNA; 9513 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5072 CTCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAA
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     New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-AUG-1999;
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c fibrosis, pulmonary hypertension, emphysema, chronic obstructive of the carcinomas, and cancers which may metastasise to the lungs, including the carcinomas, and cancers which may metastasise to the lungs, including to breast and prostate cancer. The reduction of the adenosine content of the ONS reduces side effects. The A-containing ONS break down with the crelease of deoxyadenosine which activates adenosine receptors causing thronoconstriction and inflammation. AAA32313 to AAA35312 represent the concleotide sequences given in the sequence listing from the present the invention, which correspond to SEQ ID NO:1 to 185, but the sequences of differ from the previously named sequences. SEQ ID NO:11 to 1680 convention. N.B. Sequences given in the disclosure of the present convention do not match up with their corresponding SEQ ID NO:s sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 4145;
                                          1772
                                                           481 GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTTGCAGGT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1292 CTGCTTTAAAATCTCTCGGCCACCTTTGATGAGGGGACTGGGCAGTTCTAGACAGTCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 9513 BP; 2107 A; 2869 C; 2671 G; 1866 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antisinflammatory, antialtergic, antialtergic, antialtergic, antialtergic antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasconstriction, allergies, matter than the secondary vasconstriction and the secondary vasconstriction are the secondary than the secondary vasconstriction and the secondary than the secondary vasconstriction are the secondary than the secondary vasconstriction and the secondary than the secondary vasconstriction are the secondary than the secondar
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361 AGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 AATTCCACCAGTATGCAATGAATGGGGAAAAAGACATCAACAACAATGTGGAGAAAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 666-669; 1343pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 AAGTTCTCAAGGCACAGGTCTCTTCCTGGTTTGACTGTCCTTACCCCGGGGAGGCAGTGC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CTGCTTTAAAATCTCTCGGCCACCTTTGATGAGGGGACTGGGCAGTTCTAGACAGTCCCG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                        AGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGG
GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT 1831
                                                                                                                                                                                                      TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCGTTGGAAATTTCTGTTCAAGACCA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATTCCACCAGTATGCAATGAATGGGGAAAAAGACATCAACAACAATGTGGAGAAAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCCAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGTTCTCAAGGCACAGGTCTCTTCCTGGTTTGACTGTCCTTACCCCGGGGAGGCAGTGC
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1621 TCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATC 1680
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                                            GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCCTCCCATGTCTGGGAGCA 1620
                                                                                         ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA
                                                                                                                                                                   ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA
                                                                                                                                                                                                               TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG
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G 2760	Y 2701 CGGACATCACCACACCCCAACCCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACACACA	9
c 2700 c 3991	y 2641 ACTGGGTCAGTGACAAGAGGCTGCCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCCC	Qy Db
r 2640 r 3931	2581 TGGATGGCCCACACCCCACCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGCT	dd VQ
3 2580	2521 ACCTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGG	Ay
2520	/ 2461 CCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAGC	Qy Qy
1 2460 1 3751	2401 TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCCA	Qy
3691	2341 TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	Qy Db
3 2340	2281 TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCGCACCACTACAGGCTCG	Qy dd
3571	2221 GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA	Qу
352	2161 AGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAG	DP QA
2160 3451	2101 CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC	Qy db
	2041 TGAAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTTGGCCTCGGCTCCAGCATGTACC 	Ф
20 4 0 3331	1981 CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAAACTGAAGAAATCGCTCTTCATGC	Qy
1980 3271	1921 TGGATAAGTACAGGCTGAGCTGCCTGGAGGAAGGAACGGCTGCTGTTGGTGATGACCAGTA	Qy dd
1920 3211	1861 CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA	Qy Db
1860 3151	1801 CAATGGCGTCCCGAGTCAGAGTCACCATCCTTTGCGACAGAGACAGGAAAATCAGAGG	Qy Db
1800 3091	1741 AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAGA	Фр
17 4 0 3031	1681 AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAAGAG	Qy Db
2971		Db

3840	CTCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAA	3781	Qy
5131		5072	
5071	GCTCTGCATTATCTGAGGTCACAGGGCCTGGGGAGATGGAGGAAAGTGATATCCCCCAGC	3721	Qy
		5012	Db
50	CGCTCTGAGGCCTACAGGAGGGGTTAAAGCTGCCGGCACAGAACTTAAGGATGGAGCCA	3661	Qy
		4952	Db
495	TTCCTTACGAGGCGAAGAAGGACAGGTGGCGGTGCAGCCAGC	3601 4892	Qy Db
489	ACTATTTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTGT	3541 4832	Qy Db
483	CCCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGGTCGAG	3481 4772	Qy Db
348	TCCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACGTG	3421	Qy
477		4712	Db
3420	CCAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGC	3361	Qy
4711		4652	Db
65	GCAAG GCAAG	3301 4592	Qy Db
59	3GAGATGCTGGAG 3GAGATGCTGGAG	3241 4532	Qy Db
ω ,⊷	TCTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCATGACCT	3181	Qy
		4472	Db
18	CTTCCGCAGT	3121 4412	Qy Db
1 2	TCCCCGA	3061	Qy
	TCCCCGA	4352	Db
3060	CCGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTGA	3001	Qy
4351		4292	Db
3000	CCTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCACA	2941	Qy
4291		4232	Db
2940	CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT	2881	Qy
4231		4172	Db
2880	AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT	2821	Qy
4171		4112	Db
2820	AAGAGCCTGAGAGACACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGA	2761	Qy
4111		4052	Db
05	വ	3992	Db

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RESULT 9
AAF21436
The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                Disclosure; Page 47-55; 1592pp; English.
                                                                                                                                                                                                                                             Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for {\rm tr}
                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-679539/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (NYCE/) NYCE J W.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-MAR-2001 (first entry)
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                                                                                                                                                                                                                    respiratory obstructions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9908-0127958
                                                                                                                                                                                                                                             e.g. for treating
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AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCCAAGAGAAGAG		CACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACT	GETCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG	GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCC	TGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCCAGGGTGCCCCTTCAATGGCT 1	AACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCGGG1	ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG 1	ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA 1	TGCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCG 1	ATGGCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCA	GTTACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCCAGCGGAGTG 9 11 1 1 1 1 1 1 1	TCGATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGC 9	AGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTCT 8	AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC 7	GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG 7 	AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACG 6
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                                                                                        CTCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAA 3840
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                                 vector, and screening with a cross-species iNOS probe. The cDNA can be used to prepare iNOS for therapeutic use. Alternatively, it is used in gene therapy strategies for treatment of vascular occlusive disease associated with atherosclerosis, vascular bypass and diabets
                                                                                 A cDNA clone (AAT10115), designated pHINOS, codes for the human hepatocyte inducible nitric oxide synthase (iNOS = AAR88464). It would be isolating mRNA from hepatocytes induced in vitro for iNOS biosynthesis, preparing a cDNA library in a phage lambda Zap II
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                                                                                                                                                    Claim 72; Page 53-58; 91pp; English.
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                        mellitus, tumor cell growth, and microbial infections.
                                                                                                                                                                            Inducible nitric oxide synthase gene - useful in gene therapy treat, e.g. vascular occlusive disease and cancer
                                                                                                                                                                                                                                                          Billiar TR,
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vascular occlusive disease; cance
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Qy 2101 CTCGGTTCTGCGCCTTTGCTCATGACATTV	21 TGCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCG 1	Qy
Db 2041 TGAAAGGCTCAACAAATTCAGGTAC	961 ATGGCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCA	Db Qy
1981	901 GTTACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCAGCGGAGTG 960 	Qy Db
1921	841 TCGATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGC 900	Qy
Db 1861 CGCTCGCCTGGGACCTGGGGGCCTTATTC:	781 AGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTCT 840	Оу Дъ
1801	721 AGATAGAAACAACAGGAACCTACCAACTGACGGAGATGAGCTCATCTTCGCCACCAAGC 780	Qy Db
1741	661 GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG 720 	Qy Db
1681	601 AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACG 660 	Qy Db
1621	541 CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGGACA 600	Qy Db
1561	481 GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT 540 	Qу
1501	421 TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA 480 	Оу
1441	361 AGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGG 420 	Оу
1381	301 CCTGTGCCACCTCCAGTCACACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC 360 	Оу
1321	241 AATTCCACCAGTATGCAATGAATGGGGAAAAAGACATCAACAATGTGGAGAAAGCCC 300 	Qy Db
1261	181 GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA 240 	Qy Db
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Db 1021 TGCCAGATGGCAGCATCAGAGTACGGCCCCC	Query Match 97.5%; Score 4043; DB 17; Length 4145; Sest Local Similarity 100.0%; Pred. No. 0; Mismatches 4143; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	Qu Be Ma

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Matches 4132
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septic shock; inflammation; ischemia; dementia; obesity; tumor;
agonist; antagonist; vector; CHO; Chinese hamster ovary;
                                                                                                                                                                                                                                                                                                                                                                                                         Human chondrocytes were incubated with interleukin-1-beta to induce nitric-oxide-synthase. cDNA was generated and used to construct a library in lambda ZAPII. This was screened with a 650 bp fragment of mouse inducible NO-synthase cDNA to identify the full-length clone pBSHSINOS. The insert was transferred to pSVL to give a vector capable of expressing NO-synthase in CHO cells under control of a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 25-31; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New human inducible nitric oxide synthase - useful identifying enzyme inhibitors and stimulators, and and treatment of e.g. viral infections or tumours
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4132; Conserv
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                                                                 AATTCCACCAGTATGCAATGAATGAGGGAAAAAGACTCAACAACAATGTGGAGAAAGCCC
                                                                                                                   GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA
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                                                   AATTCCACCAGTATGCAATGAATGGGGAAAAAGACATCAACAACAATGTGGAGAAAGCCC
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               TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG
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2580	ACCTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGG	2521	Qy
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5	CATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAG	4	Qy
47		4	Db .
2	GTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCC	40	Qy
2400 2419	TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	2341 2360	Оу
2359	>> −	2300	Db
2340	TCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACCTACAGGCTC	2281	Qy
2299	GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA	24	D &
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J N	AGCTCACCCCGATGGGAGAAGGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCT	2161 2180	p Q
2179	CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC	2120	뮹
2160	TCGGTTCTGCCCCTTTGCTCATGACATTGATCAGAAGCTGTCCCCACCTGGGGGCCCTCT	$\stackrel{\sim}{\vdash}$	Qy
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2059	GTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCATG	00	ф
2040	TTC	1981	Qy
1980 1999	TGGATAAGTACAGGCTGAGCTGCCTGGAGGAAGGAACGGCTGCTGTTGGTGGTGACCAGTA	1921 1940	Фр
	CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA	8	ДЬ
1920	GCTGGCCTGGGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGC		Qy
1860 1879	CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAGG	1801	Оγ
1819	GATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAG	.76	р
1800	AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAGA	74	Qy
75		70	DЬ
4	GGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGAGCCCAAGAGAGAG		νQ
1699	TCACCCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCCTTTCTACTACTACTACTCTLLLLLLLLLL	1640	B &
ũ	GICCLGTGGGGGGCTGCCCGCGGGGGGGGGGGGGGGGGGG	5 0	2 5
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1500	CAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTG	4	Qγ

Qy	Дb	Qy	Db	Qy	Db	Qy	DЬ	Qy	Db	Qy	Db	Qy	рь	Qy	Db	Qy	Db	Qy	Db	Qy	Дb	Qу	Db	Qy	Дb	Qy	DЪ	Qy	Db.	Qy	Db	Qy	Db	ρy	Db
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  WPI; 1998-008577/01
                             Gonzalez-Cadavid NF,
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                                                                                                                                                                                                                                                                                                                                              inducible nitric oxide synthetase cDNA
                                                                                                                                                                                                                                                                                                                    oxide synthetase; NOS; iNOS; HPiNOS; human;
                                                       GONZALEZ-CADAVID N
RAJFER J.
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                                                                                               96US-0017373.
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                                                                                                                                                                                                       Location/Qualifiers
197..3658
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                    gene therapy;
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 directed to a method of treating erectile dysfunction in a patient by providing an agent capable of treating erectile dysfunction, and introducing an effective amount of the agent into the penile tissue of the patient. Preferably, the agent induces cavernosal smooth muscle relaxation, and/or produces an increase in the level of NOS in tissue. Preferably, the NOS is iNOS, and the agent is introduced into the corpora cavernosa of the penis. The agent is preferably an NOS inducer, an NOS protein such as HPINOS, a cDNA encoding an NOS such as HPINOS, or cDNA-transformed penile cells, especially corpora cavernosa cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This cDNA sequence includes a coding region for human penis inducible nitric oxide synthetase (HPINOS) (see AAW36113). It isolated by reverse transcription of mRNA from human penile sm muscle cells with iNOS antisense primers, combined with PCR amplification of the resulting cDNA fragments. The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treatment of erectile dysfunction - by introducing an agent into penile tissue, particularly for inducing cavernosal smooth muscle relaxation or increasing NOS levels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4070 BP; 947 A; 1197 C; 1112 G; 814 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This cDNA sequence includes a coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAAGTGACCTGCT
                                                                                                                                                                                                                                   GTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCCAGAATCTCTGGTCAAGCTGGA 430
                                                                                                                                                                                                                                                                                                                           TCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACGGCTCCTTCAA
                                                   TTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGTCCAAATCTTG
                                                                                                                                                                            TGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCAGCGGGATGAC
                                                                                                                                                                                                                                                                         CCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGGACAAGCCTACCCC
                                                                                                        TTTCCAAGACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGTCCAAATCTTG
                                                                                                                                                               TGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGGCAGCGGGATGAC
                                                                                                                                                                                                                    GTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGGTCAAGCTGGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 35-38; 53pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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Pred. No. 0;
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Gaps

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370

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240 250 180

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480 490 420

1691 CTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAAGAGAGAG	Db Qy
1631 GTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATCAGGT	Qy Db
1571 GGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCCATGTCTGGGAGCATCAC 	dd Ad
1511 CCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	ф
1451 CGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGACCAT 	Qу Дъ
1391 GGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCTGGAAAGACCAC 	ОУ
1331 CACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCCTGGAG 	рь
1271 GCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCTGGTACATG	dq Qy
1211 ATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	Оу
1151 CCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGGAACATC	Qy Db
1091 GAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCAATGGCC 	ОУ
1031 CAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCGACCTGG 	Qy Db
971 CGACTTCCGGGTGTGGAATGCTCAGCTCATCCGCTATGCTGGCTACCAGATGCCAG 	ОУ
911 CAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCAGCGGAGTGATGGCA 	Qy Db
851 CAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGCGTTACT	Оу Дъ
791 CAATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTCTTCGATG	ОУ
731 AACAGGAACCTACCAACTGACGGAGATGAGCTCATCTTCGCCACCAAGCAGGCCT	Qу
671 AGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGGAGATAG	Db Qy

CAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGTCTGCTGGCTT 2890	2831	Qy
GAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGAAGTTCACCAA 2820	2761	рb
AGACAGAGGCTGGAGGCCCTGTGCCCAGCCCTCAGAGTACAGCAAGTGGAAGTTCACC	2771	VQ
CACACCCCCAACCCAGCTGCTCCCAAAAGCTGGCCCAGGTGGCCACAGAAGAGCCTGA 2760		Db
ACACCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAGAAGAGCCTG	2711	Qy
TGACAAGAGGCTGCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCCCCGGACATCAC 2700	2641	Дb
GACAAGAGGCTGCCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCCCCGGACATC	2651	γQ
CACACCCCACCAGACAGTGCGCCTGGAGGCCCTGGATGAGAGTGGCAGCTACTGGGTCAG 2640	2581	מם
ACACCCCACCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGCTACTGGG	2591	ОУ
TTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGGTGGATGGCCC 2580	2521	Db
TGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGGTGGATGGCC	2531	ν
6666	2461	Db
GAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAGCACCTTGGG	2471	ν
GAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCCACCATCCTGGT 2460	2401	qġ
AGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCCACCATCCTG	2411	Qy
ACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	2341	Db
CAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCATG	2351	γQ
CAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTCGTGCAGGACTC 2340	2281	Db
AAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTCGTGCAGGACT	2291	Qy
AACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACATTCAGATCCC 2280	2221	Db
CTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACATTCAGATCC	2231	у
GATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCTGGGCCGTGCA 2220	2161	Db
ATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCTGGGCCGTGC	2171	Qy
CGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTCAGCTCACCCC 2160	2101	Db
GCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTCAGCTCACCC	2111	ν
CAACAACAAATTCAGGTACGCTGTGTTTTGGCCTCGGCTCCAGCATGTACCCTCGGTTCTG 2100	2041	da
AACAACAATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGTACCCTCGGTTC	2051	Ωу
	.98	Db :
GGAGACTGCCCTGGCAATGGAGAGAAACTGAAGAAATCGCTCTTCATGCTGAAAGAGC	1991	Qγ
CAGGCTGAGCTGCCTGGAGGAACGGCTGCTGTTGGTGACCAGTACGTTTGGCAA 1980	1921	Db
AGGCTGAGCTGCCTGGAGGAAGGAACGGCTGCTGGTGGTGGTGACCAGTACGTTTGGC	1931	Qy
GACCIGGGGGCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCATGGATAAGTA 1920	1861	Db
GACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCATGGATAAGT	1871	ОУ
CGAGTCAGAGTCACCATCCTCTTGCGACAGAGACAGGAAAATCAGAGGCGCTGGCCTG 1860	1801	ДD
CGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAGGCGCTGGCCT	1811	Qy
	1741	Db
aaagtcttggtcaaagctgtgctctttgcctgtatgctgatgcgcaagacaatggcgt	1751	Qy

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                                                                           GGATTGATCGGAGCCTCCTCTCAAACTGGGGCCTCCCTGGTCCCTTGGAGACAAATC
                                                                                                                                                     ATTTCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAAGTAGCACCCT
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              achieved by blocking free radical production of the accumulation of free radicals in that cell. Treatment of insulin dependent diabetes mellitus (IDDM) can be achieved by by blocking nitric oxide (NO) production in a pancreatic beta cell and by providing a composition comprising an agent that reduces levels of fatty acids in the cells and protects beta-cells of the subject against lipid-mediated cell death. Cells can also be protected against nitric oxide mediated cytotoxicity by introducing into the cell an antioxidising agent. The methods can be used for protecting cells against immunotoxicity mediated by e.g. 1L-1 beta, 1L-1 alpha, gamma IFN, TMF alpha, TMF beta, IL-8, IL-9, IL-1, IL-
                                                                                                                                                                                                                                                                                                                                                                                          Protection of mammalian cells against immunotoxicity or lipotoxicity - used for treating, e.g. diabetes, obesity, wasting syndromes, osteoporosis, inflammatory diseases, autoimmune diseases or neurodegenerative diseases
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2 CTCGGCTCCAGCATGTACCCTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTG 2141	Qy 208 рь 198
22 AAGAAATTCGCTCTTCATGCTGAAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTTGGC 2081	у 202
	b 192
52 CTGTTGGTGGTGACCAGTACGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAGACAACTG 2021 	Qy 196
)2 AACCCCAAGGTTGTCTGCATGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAGGAACGGCTG 1961	.80
12 GAGACAGGAAAATCAGAGGCGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTC 1901	Qy 184:
	Db 174:
32 TGTATGCTGATGCGCAAGACAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACA 1841	y 178
	b 168
22 CGGAGACCCAAGAGAAGAGAGAGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCC 1781 	2 2
52 TCCCCTTTCTACTACTATCAGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAG 1721 	56
)2 CCTCCCATGTCTGGGAGCATCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTG 1661	Qy 160:
	Db 150:
2 TACATGCAGAATGAATACCGGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTC 1601	y 154
	b 144
12 TITCAGAAGCAGAATGTGACCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAG 1541	Qy 1483
	Db 1383
2 CTGGCCTCGCTCTGGAAAGACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGT 1481 	32
2 GTCCAGCGCTACAACATCCTGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAG 1421	Qy 1363
	Db 1263
2 GGGTGCCCCTTCAATGGCTGGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGAC 1361	130
	120
2 TGGTACGCCTGCCTGCAGTGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCA 1301	Oy 1242
	Db 1141
2 GTGCTTGAGGTGGCCATGGAACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAG 1241	Qy 1182
	Db 1081
2 CCCCTGGTCCTGCAGGCCAATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTT 1181	Qy 1122 Db 1021
2 TTCACTCAGCTGTGCATCGACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTC 1121	Qy 1062 Db 961

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Human 03-APR-2001

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treating viral influenza with antisense oligonucleotides that hybridize with inducible nitride oxide synthase mRNA and inhibit synthesis of the enzyme, reducing the production of nitric oxide in lungs \, -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human;
iNOS; c
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GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT
                                              TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA
                                                                                                                                                                 CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC
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TCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATC 1680
                        GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCCCCATGTCTGGGAGCA
                                   ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA
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CTGGGTCAGTG GGACATCACCA
2641 ACTGGGTCAGTG
Qy 2581 TGGATGGCCCCAC
Qy 2521 ACCTTGGGGTTTGC
Qy 2461 CCATCCTGGTGGAA Db 2489 CCATCCTGGTGGAA
Qy 2401 TGTTCACCATGAGG
Qy 2341 TGCAGGACTCACAG
Qy 2281 TTCAGATCCCCAAG
Oy 2221 GGGCCGTGCAAACC
Qy 2161 AGCTCACCCCGATG
Qy 2101 CTCGGTTCTGCGCC
Qy 2041 TGAAAGAGCTCAAC Db 2069 TGAAAGAGCTCAAC
Qy 1981 CGTTTGGCAATGGAG
Qy 1921 TGGATAAGTACAGG
Qy 1861 CGCTGGCCTGGGAC
Qy 1801 CAATGGCGTCCCGA Db 1829 CAATGGCGTCCCGA
Qy 1741 AGATTCCATTGAAA Db 1769 AGATTCCATTGAAA
Qy 1681 AGGTAGAGGCCTGG
Db 1649 TCACCCCCGTGTTTCAC

1 CTCAAGTCTTATTTCCTCAACGTTGCTCCCCATCAAGCCCTTACTTGACCTCCTAACAA 3840 	Qy 3781 Db 3809	
1 GCTCTGCATTATCTGAGGTCACAGGGCCTGGGGAGATGGAGGAAAGTGATATCCCCCAGC 3780 	Qy 3721 Db 3749	
1 CGCTCTGAGGGCCTACAGGAGGGGTTAAAGCTGCCGGCACAGAACTTAAGGATGGAGCCA 3720 	ъ ч з	
1 TTCCTTACGAGGCGAAGAAGGACAGGGTGGCGGTGCAGCCCAGCAGCCTGGAGATGTCAG 3660	y 36	
ACTATTTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTGT	Qy 3541 Db 3569	
1 CCCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAA	34	
1 TCCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACGTGG 3480 	y 34 b 34	
1 CCAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGC 3420 		
1 TGGCCCAGAAGGGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGCCTGCCT	Qy 3301 Db 3329	
TGGTGTTTGGGTGCCGCCGCCCAGATGAGGACCACATCTACCAGGAGAGAGTGCTGGAGA 33		
1 TCTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCATGACCT 3240	Qy 3181 Db 3209	
1 ATCCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGCAGTT 3180	ωω	
AGCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCGAGG 31	Qy 3061 Db 3089	
CCGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTGA 30	Qy 3001 Db 3029	
CCTCCCGGGATCACACGCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCACA 3000 	Qy 2941 Db 2969	
CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT 2940 	Qy 2881 Db 2909	
AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT 2880 	Qy 2821 Db 2849	
1 AAGAGCCTGAGAGACAGAGGCTTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGA 2820	Qy 2761 Db 2789	
TGGACATCACCACACCCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAG 278	Db 2729	

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                                                                                                                                                                                                                                                                                                                        The present invention provides a novel method of treating influenza virus infection by administering an antisense ollogonucleotide directed at the human inducible nitric oxide synthase (INOS) mRNA. This is useful in preventing the symptoms of influenza infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Treating viral influenza with antisense oligonucleotides that hybridize with inducible nitride oxide synthase mRNA and inhibit synthesis of the enzyme, reducing the production of nitric oxide in lungs \, -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          enzyme, reducing the production of nitric
                                                                                                                                                                                                                                                                              Sequence
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                                               GAAAAAGACATCAACAACAATGTGGAGAAAGCCCCCTGTGCCACCTCCAGTCCAGTGACA 326
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221 SHRICCIICHIGHNAIHCHIGHNANIGANNIACCGGIGGGGGGCIGCCCGGGAAAAC 138	2
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CTGTGCTCCA	Db
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	Db
07 CTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAGACCAGGCTGTCGTTGAGATCAACATT 146	Qγ
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Search completed: March 14, 2003, 13:36:11 Job time: 1119 secs

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GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
Compugen Ltd.
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March 14, 2003, 13:16:13; Search time 270 Seconds (without alignments)

10774.929 Million cell updates/sec

Title: Perfect score: US-09-490-208-3

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Scoring table: OLIGO_NUC Gapop 60.0 , Gapext 60.0

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Word size : 501302 seqs, 350932545 residues

Total number of hits satisfying chosen parameters:

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Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Published_Applications_NA: * //cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution

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92	165	165	174	184	248	Score
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Sequence 27584, A	Sequence 5546, Ap	Sequence 22316. A	Sequence 1881. An	Sequence 10947. A	Sequence 1831. An	Description

ALIGNMENTS

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US-09-998-598-1831/c
                                                         Sequence 1831, Application Patent No. US20020150922A1 GENERAL INFORMATION:
                 APPLICANT: Stolk, John A. APPLICANT: Xu, Jiangchun
     APPLICANT:
Chenault, Ruth A.
                                                                                             US/09998598
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CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR PRIOR DATE: 2000-05-26
PRIOR PPLICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 99/632,366
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR PRIOR PRIOR DATE: 2000-09-77
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; ORGANISM: Homo sapiens
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APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K
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CURRENT FILING DATE: 2001-11-16
NUMBER OF SEQ ID NOS: 2606
SOFTWARE: Corixa Invention Disclosure Database
SEQ ID NO 1831
LENGTH: 256
                               PRIOR AFFLACE.

PRIOR FILING DATE: 2001-01-30

PRIOR APPLICATION NUMBER: PCT/
PRIOR APPLICATION DATE: 2001-01-30
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Best Local :
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TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
                                                                                                           PRIOR APPLICATION NUMBER: PCT/US01/00664
                                                                                                                                   PRIOR APPLICATION NUMBER: PCT/US01/00667 PRIOR FILING DATE: 2001-01-30
                                                                                                                                                                                PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: Aeomica-X-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2875 GGGTGTCTGCTGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCA 2934
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APPLICATION NUMBER: PCT/US01/00665 FILING DATE: 2001-01-30
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Hanzel, David K.
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                                                                PCT/US01/00669
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APPLICATION NUMBER: PCT/US01/00668
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00663

FILING DATE: 2001-01-30

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                                                                                                                                                                     GENERAL INFORMATION:

APPLICANT: Stolk, John A.

APPLICANT: Xu, Jiangchun
APPLICANT: Chenault, Ruth A.

APPLICANT: Meagher, Madelein Joy
APPLICANT: Meagher, Madelein Joy
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER
FILE REFERENCE: 210121.561
                                  NUMBER OF SEQ ID NOS: 2606
SOFTWARE: Corixa Invention Disclosure Database
SEQ ID NO 1881
LENGTH: 174
                                                                                                                                                                                                                                                                                                                                                        Sequence 1881, Application US/09998598 Patent No. US20020150922A1
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Best Local
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                                                                                                                                CURRENT FILING DATE:
                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/998,598
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FEATURE:
OTHER INFORMATION: MAP TO AC005697.1
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.84
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 0.92
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.92
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.79
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.79
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.79
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.95
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ORGANISM: Homo
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APPLICATION NUMBER: US 60/234,687
FILING DATE: 2000-09-21
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FILING DATE: 2001-01-30
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                       DNA
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100.0%; Pi
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Pred. No. 1e-84;
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SOFTWARE: Annous
SEQ ID NO 22316
SEQ ID NO 22316
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Best Local Similarity
Matches 174; Conserv
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APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR APPLICATION NUMBER: GB 24263.6
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CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
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PRIOR FILING DATE: 2001-01-30
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PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
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PRIOR APPLICATION NUMBER: PCT/US01/00666
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                                                                                                                                PRIOR APPLICATION NUMBER: US 09/774,203
                                                                                                                                                           PRIOR APPLICATION NUMBER: US 09/608,408 PRIOR FILING DATE: 2000-06-30
                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/234,687 PRIOR FILING DATE: 2000-09-21
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                                                                                NUMBER OF SEQ ID NOS: 49117
                                                                                                           PRIOR FILING DATE: 2001-01-29
                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: PCT/US01/00670
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                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: PCT/US01/00661 FILING DATE: 2001-01-30
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                                                          Annomax Sequence
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                                                          Listing Engine vers.
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RESULT 5
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                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR PPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: DCT/US01/00666
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 5546, Application US/09864761 Patent No. US20020048763A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Chen, Wensheng
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                                                                    PRIOR EILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00664
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: Aeomica-X-1
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               APPLICATION NUMBER: PCT/US01/00663 FILING DATE: 2001-01-30 APPLICATION NUMBER: PCT/US01/00662
                                                                                                    FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00668
                                                                                                                                            APPLICATION NUMBER: PCT/US01/00665
                                                                                  FILING DATE: 2001-01-30
                                                                                                                                                                      FILING DATE:
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Hanzel, David K.
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Conservative (
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NN: EXPRESSED IN FETAL LIVER, SIGNAL = 4.5

NN: EXPRESSED IN BONE MARROW, SIGNAL = 4.5

NN: EXPRESSED IN PLACENTA, SIGNAL = 4.2

NN: EXPRESSED IN HELA, SIGNAL = 3.7

NN: EXPRESSED IN HEART, SIGNAL = 3.7

NN: EXPRESSED IN HEART, SIGNAL = 4.6

NN: EXPRESSED IN ADULT LIVER, SIGNAL = 4.6

NN: NT HIT: X85764.1, EVALUE 1.00e-127

NN: SWISSPROT HIT: 062699, EVALUE 2.00e-26
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2001-01-30
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CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 99/632,366
PRIOR APPLICATION NUMBER: US 99/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00667
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US-09-864-761-27584/c
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Acomica-x-1
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PRIOR FILING DATE: 2000-09-21
PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR FILING DATE: 2000-06-30
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OTHER INFORMATION: EXPRESSED IN LIVER, SIGNAL = 4.9

OTHER INFORMATION: EXPRESSED IN FEINL LIVER, SIGNAL = 4.6

OTHER INFORMATION: EXPRESSED IN BOME MARROW, SIGNAL = 4.5

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 4.2

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 4.3

OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 4.2

OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 4.2

OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 4.2
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PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR FILING DATE: 2001-01-30
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FILING DATE:
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2001-01-30
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100.0%; Pred. No.
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TYPE: DNA
ORGANISM: Homo sapiens
PORGANISM: Homo sapiens
OTHER INFORMATION: MAP TO AC005697.1
OTHER INFORMATION: EXPRESSED IN BOME MARROW, SIGNAL = 0.84
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.92
OTHER INFORMATION: EXPRESSED IN FUNG, SIGNAL = 0.99
OTHER INFORMATION: EXPRESSED IN FETRAL LIVER, SIGNAL = 1.1
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.79
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.95
OTHER INFORMATION: EXPRESSED IN BUTTALLYER, SIGNAL = 0.95
OTHER INFORMATION: STATEMENT HIT: B35238, EVALUE 3.00e-23
OTHER INFORMATION: SWISSPROT HIT: B3528, EVALUE 3.00e-13
OTHER INFORMATION: NT HIT: AB022318.1, EVALUE 5.00e-45
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PRIOR APPLICATION NUMBER: PCT/USO1/00662
PRIOR APPLICATION NUMBER: PCT/USO1/00662
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00661
PRIOR APPLICATION NUMBER: PCT/USO1/00661
PRIOR APPLICATION NUMBER: PCT/USO1/00670
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2000-09-21
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR APPLICATION NUMBER: US 09/774,203
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Search completed: March 14, 2003, 16:15:53
Job time: 275 secs
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FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00669
FILING DATE: 2001-01-30
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FILING DATE: 2001-01-30
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Title:
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                                                                                                                                                                                                                                                                                                Database :
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Maximum DB seq length: 2000000000
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US-09-490-208-3
4145
1 ctgctttaaaatc
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12489.357 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Result		Query				
No.	Score	Match		DB	ID	Description
c 1		12.4	i	ٔ و	AI738789	AI738789 wi36f02.x
c 2	417	10.1	470	9	AI953734	AI953734 wg47g02.x
c 3	402	9.7	453	9	AI991263	AI991263 wu41f10.x
c 4	396	9.6	455	9	AI652686	AI652686 wb30f01.x
ი 5	392	9.5	445	9	AI797675	AI797675 we90c05.x
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567	532	519	460	456	518	235	619	360	604	833	523	470	177	583	517	276	453	327	366	396	168	168	554	348	278	867	260	325	5 5 5	705	245	377	541	355	364	621	513	516	414
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AA431389 zw76d02.r	432381 ZW/6002.	32369 zw76b04.	40427 tz70g1	3 ot4	720606 HS_5542	7165 yu67	46 Pan trog	326829 PM2-CN0	' RPCI11-1	HS_5573	5314_) HS_3017_	RPCI-11-	HS_5227	RPCI-1	EST59932) HS_31	ru67a05.s	В1935	ST58634	-	' RC5-BT05	LSH (AA877840 nr03a11.s	nf65g06.s	S_SH	BG099280 nad99h08.	EST5	nn41g02.s	wu25h08	th36b03	950112 EST36207	QVO-ST	UI-H-E	45097 UI-H-BI3	W950935 EST3630	375262 QV0-ST02	236981 xm51f	AW297448 UI-H-BW0-

ALIGNMENTS

	JOURNAL COMMENT	REFERENCE AUTHORS TITLE	SOURCE	ACCESSION VERSION KEYWORDS	RESULT 1 AI738789/c LOCUS DEFINITION
cDNA Library Preparation: M. Bento Soares, Ph.D. cDNA Library Arrayed by: Greg Lennon, Ph.D. DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:	Unpublished (1997) Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov Tissue Procurement: Ilan Kirsch, M.D., Michael R. Emmert-Buck, M.D.	l (bases 1 to 721) NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap. National Cancer Institute, Cancer Genome Anatomy Project (CGAP),	human. Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	mRNA sequence. A1738789 A1738789.1 GI:5100770 EST.	AI738789 **RATABORD TO THE TO THE TO THE TO THE TOTAL THE TO THE TOTAL THE

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                              CATTTTACTTTAATC 4145
                                                                   CCCCATGGCCACTTGGGTCTTCCCTGTATGATTCCTTGATGGAGATATTTACATGAATTG
                                                                                                       CCCCATGGCCACTTGGGTCTTCCCTGTATGATTCCTTGATGGAGATATTTACATGAATTG
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/db_xref="taxon:9606"
/clone="IMAGE:2392347"
/clone_lib="NCI_CGAP_CO16"
/tissue_type="colon tumor, RER+"
/lab_host="DH10B"
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99.7%;
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Pred. No. 1.2e-242;
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230
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                     CCAGGCCTGGCGAGTGGGTGAAAGATGGAACTTGCTGCTGAGTGCACCACCTTCAAGTGAC
                                                                                                                                                                                                        CAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAAGTAGCACCCTGGATTGA 3857
                                                                                                                                                                                                                                                                                               GTCACAGGGCCTGGGGAGATGGAGGAAGTGATATCCCCCCAGCCTCAAGTCTTATTTCCT 3797
                                                                                                              TCGGAGCCTCCTCTCAAACTGGGGCCTCCCTGGTCCCTTGGAGACAAAATCTTAAATG
                                                                                                                                                                                CAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAAGTAGCACCCTGGATTGA
CCAGGCCTGGCAAGTGGGTGAAAGATGGAACTTGCTGCTGAGTGCACCACTTCAAGTGAC
                                                                                    TCGGAGCCTCCTCTCAAACTGGGGCCTCCCTGGTCCCTTGGAGACAAAATCTTAAATG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Christopher A. Moskaluk, M.D.,
R. Emmert-Buck, M.D., Ph.D.
cDNA Library Preparation: M. Bento Soares, Ph.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome
Clone distribution: NCI-CGAP clone distribution
found through the I.M.A.G.E. Consortium/LLNL at:
www-bio.llnl.gov/bbrp/image/image.html
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bonaldo, Ph.D.
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1 (bases 1 to 470)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap
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AI953734.1 GI:5746044
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone="IMAGE:2474450"
/clone_lib="NCI_CGAP_GC6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue_type="pooled germ cell tumors"
/lab_host="DH10B"
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/db_xref="taxon:9606"
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Pred. No. 4.5e-195;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          wu41f10.xl Soares_Dieckgraefe_colon_NHCD Homo sapiens cDNA clone IMAGE:2522635 3' similar to gb:x73029 NITRIC OXIDE SYNTHASE,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 453)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
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disease"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        www-bio.llnl.gov/bbrp/image/image.html
Insert Length: 563     Std Error: 0.00
Seg primer: -40UP from Gibco.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/ILNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA sequence.
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Contact: Robert Strausberg, Ph.D.
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National Cancer Institute, Cancer Genome Anat
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                               /tissue_type="pooled germ cell tumors"
/lab_host="DH10B"
/lab_host
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/clone_lib="NCI_CGAP_GC6"
   reaction. The driver was PCR-amplified cDNAs from a
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                                                                                                                                                                                                                                                                                                                                                                                                                               we90c05.xl Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2348360 3' similar to gb.x73029 NITRIC OXIDE SYNTHASE, INDUCIBLE (HUMAN);, mrna sequence.
                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 445)
                                                                                                                                                    This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                           Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                         Unpublished (1997)
                                                                                                                                                                                                                                                Tumor Gene Index
                                                                                                                                                                                                                                                                NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                   AI797675.1 GI:5363147
                                                                                                                                                                                      Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                  human.
                                                                                                                                 Insert Length: 514
                                                                                                                                                  IMAGE Consortium (info@image.llnl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       124
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of 5,000 clones made from the same library (cloneIDs 1257096-1258631, 1469064-1470983, and 1475592-1476743). Subtraction by Bento Soares and M. Fatima Bonaldo. "
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:234850"
/clone_1ib="Soares_NFL_T_GBC_S1"
                                                                                            Location/Qualifiers
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Pred. No. 1.2e-184;
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                                                                                                                                                                                                                                                                                                                        391 bp mRNA linear EST 06-MAR-2002 K-EST0109948 S20T665307 Homo sapiens cDNA clone S20T665307-49-B07 5', mRNA sequence.
                  Unpublished (2002)
Contact: Kim YS
                                                                                                                            Kim, N.S.,
                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                  Homo sapiens
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                                                                                                      Oh, K.J., Cheong, J.E., Sohn, H.Y.,
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                                                             21C Frontier Korean EST Project 2001
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Research
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                                                                                                        Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,
E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. a
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Pred. No. 1.1e-182;
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                                                                                                                                                                                                                                                                                                                   3347
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                                                                                                                                                                                                                                                                                                                                                                                                                          284 GGTGCTCCGTGTGCTCCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGGATGTGCGCAT 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44 GCCCTTCCGCAGTTTCTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGG 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGCCTGGCAAGCCCAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCAGCTGGCCAGCGA 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTGCCTGGCAAGCCCAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGA 3406
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGCCGCATGACCTTGGTGTTTGGGTGCCGCCGCCCAGATGAGGACCACATCTACCAGGA 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGCCGCATGACCTTGGTGTTTGGGTGCCGCCCGCCCAGATGAGGACCACATCTACCAGGA 3286
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                                                                                                                                                        AW297448 414 bp mRNA
UI-H-BWO-ais-f-03-0-UI.sl NCI_CGAP_Sub6
                                                         EST
Homo sapiens
                                                                                AW297448.1 GI:6704084
                            numan
                                                                                                                              IMAGE: 2730388 3', mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  High quality sequence stop: 391.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: yongsung@mail.kribb.re.kr
Plate: 49 row: B column: 07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fax: +82-42-860-4409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="organ: Stomach; Vector: pCNS; Site_1: EcoRI; Site_2: NotI; The poly (A)+ RNA was dephosphorylated with bacterial alkaline phosphatase (BAP) and then decapped with tabacco acid pyrophosphatase (TAP). The decapped intact mRNA was ligated with DNA-RNA linker including EcoR I site by treatment of T4 RNA ligase and the first strand cDNA was synthesized from oligo dT-selected mRNA by priming with dT-tailed vector. The dT-tailed vector was adjusted to have about 60nt. The cDNA vector was circularized with E. coli DNA ligase after digestion of EcoRI which site is also included in vector An RNA strand converted to a DNA strand by Okayama-Berg method. The obtained cDNA vectors were used for transformation of competent cells E. coli ToplOF' by electroporation method. The cDNA libraries constructed by this method are full-length enriched cDNA library."
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/clone="S20T665307-49-B07"
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AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                           Best Local
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                                                                       3809 CCCATCAAGCCCTTTACTTGACCTCCTAACAAGTAGCACCCTGGATTGATCGGAGCCTCC 3868
                                                                                                                                                                                                    3749 TGGGGAGATGGAGGAAAGTGATATCCCCCAGCCTCAAGTCTTATTTCCTCAACGTTGCTC 3808
                    354
                                                                                                                                                              414 TGGGGAGATGGAGGAAAGTGATATCCCCCCAGCCTCAAGTCTTATTTCCTCAACGTTGCTC 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
CCCATCAAGCCCTTTACTTGACCTCCTAACAAGTAGCACCCTGGATTGATCGGAGCCTCC 295
                                                                                                                                                                                                                                                                                                                                                                           Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
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National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /lab_nost="UHIUB (Life Technologies)"
/note="Vector: pp773D-Pac (pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; NCI_CGAP_Sub6 is a subtracted library derived from BW, which consists of a mixture of four normalized libraries: NCI_CGAP_Sub6 is a subtracted library experience of the NCI_CGAP_Sub6 interpretation of EBW was used as a tracer in a subtractive hybridization with a driver comprising: the IMAGE pool (NCI_CGAP_Kid3 pool 1 LLAM 3334-3337, 3682-3683, 3798-38803 (IMAGE CloneIDs 1322376-1323911, 1456008-1456775,1500552-1502855); NCI_CGAP_Kid5 pool 1 LLAM 3338-3342,3722-3725, 376-3778 (IMAGE CloneIDs 132391-1323911, 14156008-1456720, 171368-1472903, 1492104-1493255); NCI_CGAP_Lu5 pool 1 LLAM 3575-3582, 3851-3854 (IMAGE CloneIDs 1414920-1417991, 1520904-1522439); NCI_CGAP_GC4 pool 1 LLAM 3164-3167, 3716-3720, 3733-3735 (IMAGE CloneIDs 1257096-1258631,1469064-1479983, 1475592-1476743); NCI_CGAP_PC2 pool 1 LLAM 2457-2459, 2758-2759, 3062-3068 (IMAGE CloneIDs 985608-9866759, 1101192-1101959, 1217928-1220615); NCI_CGAP_Col0 pool 1 LLAM 2647-2459, 2758-2759, 1217928-1220615); NCI_CGAP_Col0 pool 1 LLAM 2647-2459, 2758-2759, 1217928-1220615); NCI_CGAP_Col0 pool 1 LLAM 2647-2653, 1144584-1145351); (50% of the driver population), plus a pool of 3,840 arrayed clonest from NCI_CGAP_Sub1 (IMAGE CloneIDs 2710536-2712455) and NCI_CGAP_Sub1 (IMAGE CloneIDs 2710536-2712455) and NCI_CGAP_Sub2 (IMAGE CloneIDs 2710536-2712455) and NCI_CGAP_Sub3 (IMAGE Clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAG_LIB=NCI_CGAP_Ov18
TAG_TISSUE=ovary
TAG_SEQ=GCGACA"
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/lab_host="DH10B (Life Technologies)"
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99.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                       High quality sequence stop: 331.
                                                                                                                                                                                                                                                                                                                                                                                                                                              www-bio.llnl.gov/bbrp/image/image.html
Seq primer: -40UP from Gibco
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tissue Procurement: Christopher A. Moskaluk, M.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Robert Strausberg, Ph.D.
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Unpublished (1997)
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National Cancer Institute, Cancer Genome Ana
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DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cDNA Library Preparation: M. Bento Soares, Ph.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Emmert-Buck, M.D., Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (bases 1 to 516)
                       139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cgapbs-r@mail.nih.gov
                    þ
             polylinker; Site_1: Not I; Site_2: Eco RI; Plasmid DNA from the normalized library NCI_CGAP_GC4 was prepared, and scircles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from a pool of 5,000 clones made from the same library (cloneIDs 1257096-1258631, 1469064-1470983, and 1475592-1476743). Subtraction by Bento Soares and M. Fatima Bonaldo.
                                                                                                                                                                                                                                                                                     /clone="IMAGE:2687757"
/clone_lib="NCI_CGAP_GC6"
                                                                                                                                                                                                                                         /tissue_type="pooled germ cell tumors"
/lab_host="DH10B"_
                                                                                                                                                                                                                         /note="Vector:
                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                               ocation/Qualifiers
                                                                                                                                                                                                                         pT7T3D-Pac (Pharmacia) with a modified
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           M. Fatima
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ph.D., Michael
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QVO-ST0215-061299-065-hll ST0215 Homo sapiens cDNA, mRNA sequence. BF375262
                                                                                                                                                 Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar,
                                                                                                                                                                                                                                                                                                                                                                                                        Shotgun sequencing of the human transcriptome with ORF expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                        (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=QV0&t2=QV0-ST0215-061299-065-h11&t3=1999-12-06&t4=1)
Seq primer: puc 18 forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mammalia;
                                                    High quality sequence start: 33 High quality sequence stop: 51.
                                                                                                                                                                                                                                  Tel: +55-11-2704922
                                                                                                                                                                                                                                                                                                                                   Contact: Simpson A.J.G
                                                                                                                                                                                                                                                                                                                                                                                          sequence tags
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                                Location/Qualifiers
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/organism="Homo sapiens"
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Pred. No. 7.6e-159;
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                                                                                   9712 Medical Center Dr., Rockville, MD 20850, USA Tel: 301 838 3528 Fax: 301 838 0208
                                                                                                                                                            Unpublished (2000)
Contact: John Quackenbush
The Institute for Genomic Research
                                                                                                                                                                                                                            Assessment of gene expression patterns in a model of colon tumor metastasis using a 19,200 element cDNA microarray
                                                                                                                                                                                                                                                                                                 Hegde, P., Qi, R., Abernathy, K., Dharap, S., Gaspard, R., Ga, I.E., Saeed, A.I., Sharov, V., Lee, N.H., Yeatman, T.J. and
                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 621)
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                                                 johng@tigr.org
21
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tissue mRNA and cDNA amplification were performed under low stringency conditions."

135 c 152 g 110 t
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99.7%;
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Pred. No. 2.3e-156;
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ORGANISM
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2882 TGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2702 GGACATCACCACACCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAGA 2761
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2762 AGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGAA 2821
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301;
                                                                                                                                                                                                                                             The sequence contained an oligo-dT track that was present in the oligonucleotide that was used to prime the synthesis of first strand cDNA and therefore this may represent a bonafide poly A tail cDNA Library Preparation: M.B. Soares Lab Clone distribution: NCI-CGAP clone distribution information can be found through the LMA.G.E. ConsortLum/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                   Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                           Seq primer: M13 Forward POLYA=Yes.
                                                                                                                                                                                                                                www-bio.llnl.gov/bbrp/image/image.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 364)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AW445097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AW445097 364 bp mrNA linear EST 17-FEB-
UI-H-BI3-akd-e-12-0-UI.sl NCI_CGAP_Sub5 Homo sapiens cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AW445097.1
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/clone="IMAGE:273815"
/clone=lib="NCI_CGAP_Sub5"
/lab_host="DH10B (Life Technologies)"
/note="Vector: pT7T3D-Pac (Pharmacia) with a modified
                                                                                            /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="MAGE resequences, MAGA"
/note="Vector: pBluescriptSKm"
224 c 162 g 113 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GI:6986859
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RESULT 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3799 AACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAAGTAGCACCCTGGATTGAT 3858
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                                                                                                                                                                                                                                                                                                               64
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Local Similarity 99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGCCTGGCAAGTGGGTGAAAGATGGAACTTGCTGCTGTGCTGCACCACTTCAAGTGACC 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCAGGAGGTGCTATCGCACCACTGTGTATTTAACTGCCTTGTGTATATTTATGCC 4038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGGCCTGGCGAGTGGGTGAAAGATGGAACTTGCTGCTGAGTGCACCACTTCAAGTGACC 3978
                                                                                                                                                                                                                                                                                                                   TGATTCCTTGATGGAGATATTTACATGAATTGCATTTTACTTTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTGTATTTAAAAAACTAACACCCAGTCTGTTCCCCATGGCCACTTGGGTCTTCCCCTGTA 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGTATTTAAAAAAACTAACACCCAGTCTGTTCCCCCATGGCCACTTGGGTCTTCCCTGTA 4098
                                                                                                  AW449618 355 bp mRNA linear EST 17-FEB-
UI-H-BI3-aku-h-08-0-UI.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone
                                AW449618
AW449618.1 GI:6990324
                                                                 IMAGE: 2735846 3', mRNA sequence
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(IMAGE CloneIDs 1323912-1325831, 1471368-1472903, 1492104-1493255); NCI_CGAP_LID pool 1 LIAM 3575-3582, 3851-3854 (IMAGE CloneIDs 1414920-1417991,1520904-1522439); NCI_CGAP_GC4 pool 1 LIAM 3164_3167, 3716-3720, 3733-3735 (IMAGE CloneIDs 1257096-1258631,1469064-1470983, 1475592-1476743); NCI_CGAP_CD2 pool 1 LIAM 2457-2459, 2758-2759, 3062-3068 (IMAGE CloneIDs 986508-986759, 1101192-1101959, 1217928-1220615); NCI_CGAP_CD1 pool 1 LIAM 2644-2653, 2871-2872 (IMAGE CloneIDs 1057416-1061255, 1144584-1145351). (10% of the driver population) plus a pool of 3,840 arrayed clones from NCI_CGAP_Sub1 (IMAGE CloneIDs 270616-2712455) (10% of the driver population), plus a pool of 5,472 clones from NCI_CGAP_Sub2 (IMAGE CloneIDs 2710536-2712455) (10% of the driver population), plus a pool of 5,472 clones from NCI_CGAP_Sub2 (IMAGE CloneIDs 2712456-2723591) (10% of the driver population), plus a pool of 5,472 clones from NCI_CGAP_Sub4 (IMAGE CloneIDs 2723592-2728969) (70% of the driver population). Subtraction was performed as previously described (Bonaldo Lennon & Soares (1996): Normalization and Subtraction: Two Approaches To Facilitate Gene Discovery. Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       as a tracer in a subtractive hybridization with a dricomprising: the IMAGE pool (NCI_CGAP_Kid3 pool 1 LLAM 3334-3337, 3682-3683, 3798-3803 (IMAGE CloneIDs 1322376-1323911, 1456008-1456775,1500552-1502855);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polylinker; Site_1; Not I; Site_2; Eco RI; NCI_GAP_Sub5 is a subtracted library derived from NCI_GAP_Sub4. The NCI_GAP_Sub5 library had 3 million recombinants. A single-stranded DNA preparation of NCI_GAP_Sub4 was used single-stranded DNA preparation of NCI_GAP_Sub4 was used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAG_SEQ=AAACG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Research 6, 791-806.
TAG_LIB=NCI_CGAP_Col0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAG_TISSUE=colon
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Pred. No. 4.5e-135;
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                                                                                                                                                             Matches 339;
                                                                                                                                                                                                        Query Match
Best Local Similarity
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                                      3804 TGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAAGTAGCACCCTGGATTGATCGGAG 3863
355 TGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAAGTAGCACCCTGGATTGATCGGAG 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequence contained an oligo-dT track that was present in the oligonucleotide that was used to prime the synthesis of first strand cDNA and therefore this may represent a bonafide poly A tail cDNA Library Preparation: M.B. Soares Lab Clone distribution: NCI-CGAP clone distribution information can be found through the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           www-bio.llnl.gov/bbrp/image/image.html The following repetitive elements were found in this cDNA sequence: 1-27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCI-GAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seq primer: M13 Forward
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                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              as a tracer in a subtractive hybridization with a driver comprising: the IMAGE pool (NCI_CGAP_Kid3 pool 1 LLAM 3334-3337, 362-3663, 3798-3803 (IMAGE CloneIDs 132376-1323911, 145608-1456775,5500552-1502855); NCI_CGAP_Kid5 pool 1 LLAM 3338-3342,372-3725, 3776-3778 (IMAGE CloneIDs 1323912-1325831, 1471368-1472903, 1492104-1493255); NCI_CGAP_Lu5 pool 1 LLAM 3575-3582, 3851-3854 (IMAGE CloneIDs 1414920-1417991,1520904-1522439); NCI_CGAP_Lu5 pool 1 LLAM 3575-3582, 3733-3755 (IMAGE CloneIDs 1257096-1258631,1469064-1470983, 1475592-1476743); NCI_CGAP_Lu5 pool 1 LLAM 2457-2459, 2758-2759, 3062-3068 (IMAGE CloneIDs 985608-986759, 1101192-1101959, 1217928-1120615); NCI_CGAP_Col0 pool 1 LLAM 2644-2653, 2871-2872 (IMAGE CloneIDs 1057416-1061255, 1144584-1145351). (10% of the driver population) plus a pool of 3,840 arrayed clones from NCI_CGAP_Sub1 (IMAGE CloneIDs 2702661-2710535) and NCI_CGAP_Sub2 (IMAGE CloneIDs 2702661-2710535) and NCI_CGAP_Sub3 (IMAGE CloneIDs 270266-2723591) (10% of the driver population), plus a pool of 11,136 clones from NCI_CGAP_Sub3 (IMAGE CloneIDs 270266-2723591) (10% of the driver population), plus a pool of 5,472 clones from NCI_CGAP_Sub4 (IMAGE CloneIDs 270266-2723591) (10% of the driver population), plus a pool of 5,472 clones from NCI_CGAP_Sub4 (IMAGE CloneIDs 270265-2728969) (70% of the driver population), plus a pool of 5,472 clones from NCI_CGAP_Sub4 (IMAGE CloneIDs 270265-2728969) (70% of the driver population).

Subtraction was performed as previously described (Bonaldo Lennon & Soares (1996): Normalization and Subtraction:

Two Approaches To Facilitate Gene Discovery. Genome Research 6, 791-806.
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/lab_host="DHOIB (Life Technologies)"
/lab_host="DHOIB (Life Technologies)"
/note="Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not 1; Site_2: Eco RI; NCI_CGAP_Sub5 is a subtracted library derived from NCI_CGAP_Sub4. The
                                                                                                                                                                                                                                                                                                                                                                      TAG_SEQ=AAACG"
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                                                                                                                                                                                                        99.7%;
                                                                                                                                                                                                        Score 289; DB 10;
Pred. No. 1.3e-131;
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AW391328
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                                                                    Query Match
Best Local Similarity
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3407 GGTGCTCCGTGTGCTCCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCAT 3466
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HCGP http://www.ludwig.org.br/ORESTES.
The FAPESP/LICR Human Cancer Genome Project
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seq primer: puc 18 forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (http://www.ludwig.org.br/scripts/gethtml2.pl?ti=QV0&t2-QV0-ST0215-
061299-065-f03&t3=1999-12-06&t4=1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tel: +55-11-2704922
Fax: +55-11-2707001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
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                                                                                                                                                        127 a
                                                  Conservative
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                                                                                                                                           /note="Organ: stomach; Vector: puc18; Site_1: SmaI; Site_2: SmaI, A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."
                                                                                                                                                                                                                                                                                                                                                /clone_lib="ST0215"
                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                            /dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                    99.3%;
                                       Score 269; DB 10; L
Pred. No. 1.2e-121;
Pred. No. 1.3e-31;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: John Quackenbush
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 3528
Fax: 301 838 0208
                                                                                                                                                                                                            Seq primer: Reverse
                                                                                                                                                                                                                                                                                                                                                  Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                        Assessment of gene expression patterns in a model of colon tumor metastasis using a 19,200 element cDNA microarray
                                                                                                                                                                                                                                                                                                                                                                                                        Hegde, P., Qi, R., Abernathy, K., Dharap, S., Gaspard, R., Gay, C., I.E., Saeed, A.I., Sharov, V., Lee, N.H., Yeatman, T.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 377)
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        Conservative
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                                                                                /clone_lib="MAGE resequences, MAGA"
/note="Vector: pBluescriptSKm"
132 c 96 g 71 t
                                                                                                                                        /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                          location/Qualifiers
                 5.6%; Score 231; DB 10; 100.0%; Pred. No. 8e-103;
     0;
   Mismatches
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                                  DB 10; Length 377;
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Best Local Similarity
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                                  4110 TGGAGATATTTACATGAATTGCATTTACTTTAATC 4145
                                                                                                                              3930 AGTGGGTGAAAGATGGAACTTGCTGCTGAGTGCACCACTTCAAGTGACCACCAGGAGGTG 3989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              124 GCCAGCCCTCAGAGTACAGCAAGTGGAAGTTCACCAACAGCCCCACATTCCTGGAGGTGC
                                                                                                           220 AGTGGGTGAAAGATGGAACTTGCTGCTGAGTGCACCACTTCAAGTGACCACCAGGAGGTG 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64 TCCAAAAGCTGGCCCAGGTGGCCACAGAAGAGCCTGAGAGACAGAGGCTGGAGGCCCTGT 123
                                                                                                                                                                                                                                                            216;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA Sequencing by: Washington University Genome Clone distribution: NCI-CGAP clone distribution found through the I.M.A.G.E. Consortium/LLNL at: www-bio.llnl.gov/bbrp/image/image.html
Seg primer: -40UP from Gibco.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AI493548 245 bp mRNA linear EST 11-MAR-1999 th36b03.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2120333 3' similar to gb:X73029 NITRIC OXIDE SYNTHASE, INDUCIBLE (HUMAN);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 245)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AI493548
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AI493548.1 GI:4394551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Life Technologies catalog #: 11548-013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap
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                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                    74
                                                                                                                                                                                                                                                                                                                                                                                  /note="Organ: pancreas; Vector: pCMV-SPORT6; Site_1: SalI;
Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.72 kb. Life Technologies catalog #:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:212033"
/clone_lib="NCI_CGAP_Pan1"
                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue_type="adenocarcinoma"
/lab_host="DH10B"
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Db 40 TGGAGATATTTACATGAATTGCATTTACTTTAATC 5

Search completed: March 14, 2003, 10:17:24 Job time : 5428 secs

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Minimum
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                                                                                                                                                                                                                          US-08-314-917-1
                                                                                                                                                                                                                                           RESULT 1
                                                                                                                                                              Sequence 1, Application US/08314917
Patent No. 5468630
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NO.
                                  APPLICANT: Simmons, Richard L.
TITLE OF INVENTION: CDNA Clone for Human Inducible Nitric
TITLE OF INVENTION: Oxide Synthase And Process for Preparing
NUMBER OF SEQUENCES: 2
                                                                                                          APPLICANT: Billiar, Timothy R. APPLICANT: Nussler, Andreas K. APPLICANT: Geller, David A.
                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.
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Arnold B. Silverman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/Dackfiles1.seq:*
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US-08-255-046-1

US-08-455-522-1

PCT-US93-11401-1

PCT-US95-07849-1

US-09-0126-109-11

US-09-068-880-14
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Matches 4145; Conservat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
DESCRIPTION:
DESCRIPTION:
HYPOTHETICAL: N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 25-NOV-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/981,344
FILING DATE: 25-NOV-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLONE: PHINOS POSITION IN GENOME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGINAL SOURCE:
TISSUE TYPE: Induced Human Hepatocyte RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IMMEDIATE SOURCE
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TELEFAX: 866172
 241
                             181
                                                          181
                                                                                     STREET: 600 Grant
CITY: Pittsburgh
                                                                                                                                                                                                                                                                                                                                                                                                        MAP POSITION: unknown UNITS: unknown
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REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                 61 AAGTTCTCAAGGCACAGGTCTCTTCCTGGTTTGACTGTCCTTACCCCGGGGAGGCAGTGC
                                                                                                                                                                                                                                                                                                                                                              NAME/KEY:
LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Eckert Seamans Cherin & Mellott STREET: 600 Grant Street, 42nd Floor
                                                                                                                                                                               61 AAGTTCTCAAGGCACAGGTCTCTTCCTGGTTTGACTGTCCTTACCCCGGGGAGGCAGTGC
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AATTCCACCAGTATGCAATGAATGGGGAAAAAGACATCAACAACAATGTGGAGAAAGCCC
                               GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA
                                            GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA
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Pred. No. 0;
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1260 1260	ACATCCCAAATACGAGTGGTTTCGGG	ં છે છે	Фb
1200 1200	GGCCGTGACCCTGAACTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG 	- i-	pb Cy
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000	TENATEC C-C-CAGCTGTTCCACTGCCCGGGAAATGTTTGAAACAATGTCTGCAGAACACGTG 		B &
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	CTGTGCCACCCCCAGTCCAGTACACAGATGACCTTCAGTATCACAACCTCAGCAAG		DB DB
6	CCTGTGCCACCTCCAGTCCAGTGACACGACGATGACCTTCAGTATCACAACCTCAGCAAG	301	Qy
300		241	Db

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TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCCA 24	TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGGACCACTACAGGCTCG 23	GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA 22 	AGCTCACCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCT 22	CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC 21	TGAAAGAGCTCAACAACTACAGGTACGCTGTGTTTTGGCCTCCGGCTCCAGCATGTACC 21 	CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAAACTGAAGAAATCGCTCTTCATGC 20 	TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGTGACCAGTA 19 	CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA 19	CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAGG 18 	AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTTGCCTGTATGCCTGATGCGCAAGA 18 	AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAGAG	TCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATC 16	GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA 19	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAA 1.	GGTACATGGGCACAGAGATGGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCC 1
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                                                                                                                                                                                                                                                                                                                  Patent No. 5658565
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                             Sequence
                        COUNTRY: USA
ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, V
                                                                                                                                                                                      APPLICANT: Timothy R. Billiar
APPLICANT: Edith Tzeng
APPLICANT: Andreas K. Nussler
APPLICANT: David A. Geller
APPLICANT: Richard L. Simmons
TITLE OF INVENTION: Inducible Ni
TITLE OF INVENTION: Gene for Tre
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
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CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                    ADDRESSEE: Lewis F. Gould, Jr.
ADDRESSEE: Eckert Seamans Cherin & Mellott
STREET: 1700 Market Street, Suite 3232
CITY: Philadelphia
STATE: PA
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NO. 565856
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; LOCATION: 207..3668
; IDENTIFICATION METHOD: Experiment
US-08-265-046-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity Matches 4145; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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SEQUENCE CHARACTERISTICS:
LENGTH: 4145 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: cDNA
DESCRIPTION: Human Hepatocyte Inducible Ni
DESCRIPTION: Synthase cDNA Clone
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
TISSUE TYPE: Induced Human Hepatocyte RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
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LIBRARY: Lambd
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481 GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT 540
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MAP POSITION: unknown
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REGISTRATION NUMBER: 25,057
REFERENCE/DOCKET NUMBER: 119130
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                          AGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 4145; 100.0%; Pred. No. 0;
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Qy	Qу Db	Qy Db	Qy Db	Qy Db	Qy Db	Qy Db	ОУ	ОУ Db	Qу	ОУ	Db Qy	ДУ	Qу Db	Qу	ФР	Фр	Qу Дъ	Db
1561	1501 1501	1441 1441	1381 1381	1321 1321	1261 1261	1201 1201	1141 1141	1081	1021 1021	961 961	901 901	841 841	781 781	721 721	661 661	601	541 541	481
GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTGA 15	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG 14	GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCC 13	TGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT 13	AACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG 12 	ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCTGGTCCTGCAGGCCA 11	TGCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCG 10	ATGGCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCA	GTTACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCAGCGGAGTG 96	TCGATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGC 90	AGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGGATCCACTGGTCCAACCTGCAGGTCT 84	AGATAGAAACAACAGGAACCTACCAACTGACGGAGATGAGCTCATCTTCGCCACCAAGC 78	GCTCCTTCAÀAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG 72 	AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACG 66	CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA 60	
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	TGATGGCCCAACCCACCCAGCAGTGGGCCTGGAGGACCTGGATGAGAGTGGCAGCT	2581	Фр
	ACCTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCA		рь
	CCATCCTGGTGGAACTCTCCTGT	46	Оу
	. TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCCA	240	Qу
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	AGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCT	2161 2161	ОУ
	CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC 	210:	Ωy
	TGAAAGAGCTCAACAACAACTCAGGTACGCTGTGTTTTGGCCTCGGCTCCAGCATGTACC 	0 0	Db Qy
	CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCATGC 	1981 1981	Qy Db
	1 TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGTGACCAGTA	92	Db Qy
	1 CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA	86	Оy
		80	Db Qy
	1 AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGATGCTGATGCGCAAGA	174 174	Db Qy
	1 AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCCGAGAGACCCAAGAGAAGAG 		Ωу
	1 TCACCCCCGTGTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTATC	62	рь
	GTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCT	.56	рь

3780 3780	GCTCTGCATTATCTGAGGTCACAGGGCCTGGGGAAATGGAAGAAGTGATATCCCCCAGC	3721 3721	Qy Db
3720 3720	CGCTCTGAGGGCCTACAGGAGGGGTTAAAGCTGCCGGCACAGAACTTAAGGATGGAGCCA	3661 3661	Qy Db
3660 3660	TTCCTTACGAGGCGAAGAAGGACAGGGTGGCGGTGCAGCCCAGCAGCCTGGAGATGTCAG	3601 3601	Qy Db
60		Ü	Db
0	CTATTTCTTTCAGCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTGTAT		Qy
3540 3540	CCCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGGTCGAGG	3481 3481	Qy Db
3480	TCCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACGTGG	4-	da da
42	CAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGC	<u>~</u> ω	Db Db
3420	AGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGC	w	Qy
3360 3360	TGGCCCAGAAGGGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGCCTGGCAAGC	3301	Дy
3300	GGTGTTTGGGTGCCGCCGCCAGATGAGGACCACATCTACCAGGAGGAGATGCTGGAGA	N	ob Db
3300	CAGGAGGAGATGCTGGAGA	3241	Qy
	ACCT	3181	Db
3240	CTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCATGACCT	3181	Qy
3180	ATCCCTCCCATCCTTGCATCCTCATCGGGCCCTGGCACAGGCATCGTGCCCTTCCGCAGTT	3121	Оу Дъ
3120	AGCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCGAGG	3061	Db
3120	GCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCCGAGG	3061	Qy
90	CGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTGA	3001	ДЪ
3060	AGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTG	3001	Оу
3000 .	CCTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCACA	2941 2941	рь Оу
2940	TGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGC		Db
2940	CTGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT	2881	Qy
2880	AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT	2821	Db
œ	CACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTG	2821	Qy
2820 2820	AAGAGCCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGGA	2761 2761	Qy Db
2760	GGACATCACCACACCCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCAC	7	DЬ
2760	CGGACATCACCACACCCCCAACCCCAGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAG	70	Qy

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Patent No. 5882908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                      INFORMATION FOR SEQ ID NO:
                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: GOULD, Jr., Lewis F.
REGISTRATION NUMBER: 25,057
REFERENCE/DOCKET NUMBER: 116972-6
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 575-6220
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Geller, David A.

APPLICANT: Simmons, Richard L.

TITLE OF INVENTION: CDUA Clone for Human Inducible Nitric
TITLE OF INVENTION: Oxide Synthase And Process for Prepari
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APPLICATION NUMBER: US,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                    STREET: 1700 Market
CITY: Philadelphia
STATE: PA
COUNTRY: USA
ZIP: 19103
TYPE: nucleic acid STRANDEDNESS: double TOPOLOGY: linear
                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Lewis F. Gould, Jr. ADDRESSEE: Eckert Seamans Cherin
                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version
                                         LENGTH:
                                                                                                TELEFAX: (215) 575-6015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCACCACTTCAAGTGACCACCAGGAGGTGCTATCGCACCACTGTGTATTTAACTGCCTTG 4020
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                                        4145 base pairs
                                                                                                                                                                                                                                                                                                                                                                       1700 Market St. Suite
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US-08-465-522-1
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DESCRIPTION:
HYPOTHETICAL: N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLONE: PHINOS POSITION IN GENOME:
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LIBRARY: Lambd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       UNITS: unknown
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                     AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC
                                                                                                         GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG
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                                                               GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG
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                                                                                                                                                                                                                                                                                                                                         TELEX: 866172
INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/07/981,344 CLASSIFICATION: ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
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                                                                                                                                                         ORIGINAL SOURCE:
TISSUE TYPE: I
IMMEDIATE SOURCE:
                                                                                                                                                                                                            MOLECULE TYPE:
HYPOTHETICAL: 1
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 4145 base pair
                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: (412) 566-6000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
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                                             UNITS: unknown FEATURE:
                                                                                                             POSITION IN GENOME:
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CITY: Pittsburgh
STATE: PA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Arnold B. Silverman
ADDRESSEE: Eckert Seamans Cherin & Mellott
STREET: 600 Grant Street, 42nd Floor
                                                                                                                            CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Silverman, Arnold REGISTRATION NUMBER: 22,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 2
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                               MAP POSITION:
                                                                                                                                             LIBRARY:
                                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                          STRANDEDNESS:
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             NAME/KEY: CDS
LOCATION: 207.
                                                                                                CHROMOSOME/SEGMENT:
IDENTIFICATION METHOD:
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                                                                                                                            PHINOS
                                                                                                                                                                                                                                                                                                            4145 base pairs
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Nussler, Andreas
                                                                                                                                                                                                                                                                                                                                                                          (412) 566-6099
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                                                                                                                                             Lambda Zap II cDNA
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1980	TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGACCAGTA	1921	Qy
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1920	CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA	1861	Qy
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1800	AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAGA	1741 1741	Qу Дъ
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1680	TCACCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATC	1621 1621	Qy Db
1620	GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	1561	Qy
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1440	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG	1381	Qy
1440		1381	Db
1380	GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCC	1321	Qy
1380		1321	Db
1320	TGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT	1261	Qy
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1260	AACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	1201	Qy
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1200	ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG	1141	Qy
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1140	ACCIGGGCIGGAAGCCCAAGIACGGCCGCTTCGATGIGGTCCCCCIGGTCCIGCAGGCCA	1081	Qy
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RESULT 5 PCT-US95-07849-1

Sequence 1, Application PC/TUS9507849 GENERAL INFORMATION:

APPLICANT:

University of Pittsburgh of the

Commonwealth System of Higher

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                                                                                                               TGTACAGTTATTTATGCCTCTGTATTTAAAAAACTAACACCCAGTCTGTTCCCCCATGGCC
                                                                                                                                                      GCACCACTTCAAGTGACCACCAGGAGGTGCTATCGCACCACTGTGTATTTAACTGCCTTG
                                                ACTTGGGTCTTCCCTGTATGATTCCTTGATGGAGATATTTACATGAATTGCATTTTACTT 4140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
DESCRIPTION:
DESCRIPTION:
HYPOTHETICAL: N
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POSITION IN GENOME:
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TISSUE TYPE:
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LENGTH: 4145 base pairs
TYPE: nucleic acid
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NAME: GOULD, Lewis F. Jr.
REGISTRATION NUMBER: 25,057
REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
                                                                            121 AGCCAGCTGCAAGCCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAA 180
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LIBRARY: Lambo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Inducible Nitric Oxide Syntha TITLE OF INVENTION: Gene for Treatment of Disease
                                                                                                                          61 AAGTTCTCAAGGCACAGGTCTCTTCCTGGTTTGACTGTCCTTACCCGGGGAGGCAGTGC 120
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LOCATION: 207..3668
LOCATION METHOD: Experiment
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANDRESSEE: Lewis F. Gould, Jr.
ADDRESSEE: Eckert Seamans Cherin & Mellott
ADDRESSEE: ANDRESSEE: Eckert Seamans Cherin & Mellott
                                                                                                                                                                                                                                                           ocal Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: PCT/US95/07849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE:
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                                              AGCCAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAA 180
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ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG
                                                                                                                                                            ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA
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2281 TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGG	Qу Db
2221 GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAG 	Qy Db
2161 AGCTCACCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGC	Qy Db
2101 CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCC	Qy Db
2041 TGAAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGT	Фр
1981 CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCA 	Qy
1921 TGGATAAGTACAGGCTGAGCTGCCTGGAGGAAGGAACGGCTGCTGTTGGTGATGACCAG	Оy
1861 CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTG	Qy Db
1801 CAATGGCGTCCCGAGTCAGAGTCACCATCCTTTGCGACAGAGACAGGAAAATCAGA 	Оy
1741 AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAA	Оу
1681 AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAAACCIAGGAGAGAGA	Qy Db
1621 TCACCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTA 	ОУ
1561 GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	Qу
1501 CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	Qу Дъ
1441 ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGT	Qу Дъ
1381 TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAA 	Qy
1321 GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACAT	Qу

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Y 2401	421 TCCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACGTG	Ь	
y 2401 TGTTCACCATGAGGCTCAAATCTCGGCAGAATCCAGACTCCGACATCCAGCCTGCCA	421 TCCACAAGGAGCCAGCTCCTATGTTTTGCGGGGATGTGCGCATGGCCCGGGACGTG	Y	
Y	361 CCAAGGTCTATGTTCAGGACATCCTGCGGCAGCTGGCCAGCGAGGTGCTCCGTGTG	Ĭ	
Y	361 CCAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGCCCAGCGAGGTGCTCCGTGTG	,	
y 2401 TGTTCACCATGAGGCTCAAATCTCGGCAGATCTACAAAGTCCGGCATCCACCTGCCA	301 TGGCCCAGAAGGGGTGCTGCATGCGGTGCACACAGCCTATTCCCGCCTGCCT	9 4	
y 2401 TGTTCACCATGAGGCTCAAATCTCGGCAGATCTACAAAGTCGGACATCCACCATTCCACCATTCCTCCACATTCCTGCACAATCTCCGACAATCCACCATTCCTGCAGGACTCACACACCACCACACCACCACACCACCACACCACCAC	241 TGGTGTTTGGGTGCCGCCCCAGATGAGGACCACATCTACCAGGAGGAGATGCTGGAG	Ū	
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y 2401 TGTTCACCATGAGGCTCAAATCTGGGCAGAATCTACAAAGTCCGACATCCAGCGTGCCA	81 TCTGGCAGCAACGGCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCATGACC	_	
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y 2401 TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCGACATCCAGCGTGCCA 2	21 ATCCCTCCCATCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCCTTCCGCAGTT	w	
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4021 TGTACAGTTATTTATGCCTCTGTATTTAAAAAACTAACACCCAGTCTGTTCCCCCATGGCC 4080
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (512) 418-3000
TELEFAX: (512) 474-7577
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
541 TTTGTCAACCAATATTACGGCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGG 600
                                642 TTTGTCAACCAATATTACGGCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGG 701
                                                                                       582 ACCAGAGGACCCAGGGACAAGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAA 641
                                                                                                                                          361 AGGATCAAAAACTGGGGCAGCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAA 420
                                                                                                                                                                                                                                                462 AGGATCAAAAACTGGGGCAGCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAA 521
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FILING DATE: 03-MAR-1998
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                        241 TATCACAACCTCAGCAAGCAGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                              181 AACAATGTGGAGAAAGCCCCCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 30-JUL-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 TACCCCGGGGAGGCAGTGCAGCCAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAA 60
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SOFTWARE: Patenti
                                                                  ACCAGAGGACCCAGGGACAAGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAA 540
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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US-09-126-109-11

Sequence 11, Application US/09126109 Patent No. 6171856

GENERAL INFORMATION:

APPLICANT:
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APPLICANT:

APPLICANT:

Chen, Guaxun Unger, Roger H. Shimabukuro, Michio Hohmeier, Hans-Ewald Newgard, Christopher B. Thigpen, Anice

Christopher J.

APPLICANT: Rhodes, Christoph APPLICANT: Hugl, Sigrun R. APPLICANT: Cousin, Sharon TITLE OF INVENTION: METHODS TITLE OF INVENTION: TO NO-MI NUMBER OF SEQUENCES: 20

CORRESPONDENCE ADDRESS:

ADDRESSEE:

STREET: P.O. I CITY: Houston STATE: Texas

P.O. Box 4433

Arnold,

White & Durkee

Texas

COUNTRY:

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3942 ATGGAACTTGCTGCTGAGTGCACCACCTTCAAGTGACCACCAGGAGGTGCTATCGCACCAC 4001
                                         3781 GGCCTCCCTGGTCCCTTGGAGACAAAATCTTAAATGCCAGGCCTGGCAAGTGGGTGAAAG
                                                                          3882 GGCCTCCCTGGTCCCTTGGAGACAAAATCTTAAATGCCAGGCCTGGCGAGTGGGTGAAAG 3941
                                                                                                                                                 3822 TTACTTGACCTCCTAACAAGTAGCACCCTGGATTGATCGGAGCCTCCTCTCTCAAACTGG 3881
                                                                                                                3721 TTACTTGACCTCCTAACAAGTAGCACCCTGGATTGATCGGAGCCTCCTCTCAAAACTGG 3780
                                                                                                                                                                                       3642 AGCAGCCTGGAGATGTCAGCGCTCTGAGGGCCTACAGGAGGGGTTAAAGCTGCCGGCACA 3701
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APPLICANT: Nunokawa, Youichi
APPLICANT: Nunokawa, Youichi
APPLICANT: Nunokawa, Shinzo
APPLICANT: Tanaka, Shoji
TITLE OF INVENTION: Regulating the Expression of Human-Inducible Nitric Oxide
TITLE OF INVENTION: Synthase
TITLE OF INVENTION: Synthase
FILE REFERENCE: SHIM-001
CURRENT APPLICATION NUMBER: US/09/068,880B
CURRENT FILING DATE: 1998-09-02
EARLIER APPLICATION NUMBER: PCT/JP97/03303
EARLIER APPLICATION NUMBER: PCT/JP97/03303
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Matches 585;
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Patent No. 6203982
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                   3861 GAGCCTCCTCTCAAACTGGGGCCTCCCTGGTCCCTTGGAGACAAAATCTTAAATGCCA 3920
                                                                                                                                                                                                                                         3801 CGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACAAGTAGCACCCTGGATTGATCG 3860
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TGTGTATTTAACTGCCTTGTGTACAGTTATTTATGCCTCTGTATTTAAAAAAACTAACACC
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Best Local Similarity
Matches 480; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Nunckawa, Youichi
APPLICANT: Nunckawa, Shinzo
APPLICANT: Olkawa, Shinzo
APPLICANT: Tanaka, Shoji
TITLE OF INVENTION: Method for Screening Compounds
TITLE OF INVENTION: Regulating the Expression of Human-Inducible Nitric Oxide
TITLE OF INVENTION: Synthase
FILLE REFERENCE: SHIM-001
CURRENT APPLICATION NUMBER: US/09/068,880B
CURRENT APPLICATION NUMBER: US/09/068,880B
CURRENT FILING DATE: 1998-09-02
EARLIER FILING DATE: 1997-09-18
NUMBER OF SEQ ID NOS: 17
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ORGANISM: Homo sapiens
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                                               4026 AGTTATTTATGCCTCTGTATTTAAAAAACTAACACCCAGTCTGTTCCCCCATGGCCACTTG 4085
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SUMMARIES

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Billiar, T.R., Nussler, A.K., Geller, D. A
cDNA clone for human inducible nitric
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                  TGGCCAACATGCTGCTTGAGGTGGGGGGGCCTGGAGTTCCCCAGGGTGCCCCTTCAATGGCT
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Billiar,T.R., Tzeng,E., Nussler,A.K., Geller,D.A. a
Inducible nitric oxide synthase gene for treatment
Patent: US 5658565-A 1 19-AUG-1997;
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                                                              TGCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCG
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A 2280	21 GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA	Qy 22:	
2220	1 AGCTCACCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCC		
r 2220	1 AGCTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGC	у 21	
2160	01 CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC	Qý 210 Db 210	
2100	41 TGAAAGAGCTCAACAA 	20	•
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198	21 TGGATAAGTACAGGCTGAGCTGTGTGTGTGTGTGTGTGTG	19	
A 1980	21 TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGCTGCTGTTGGTGGTGACCAGT	19	
A 1920 A 1920	%1 GCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA 	Db 18	
G 1860	01 CAATGGCGTCCCGAGTCAGAGTCACCA	18	
\vdash	01 CAATGGCGTCCCGAGTCAAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAAATCAG	18	
œ	41 AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAG	17	
180	41 AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAA	17	
G 1740 G 1740	8	16	
, ,	81 AGGTAGAGGCCTGGAAAACCCCATGTTTTTGCCAGGACGACGACGACGACGACGACGACGACGACGACGA	16	
C 1680	21 TCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTACTACTACTACTACTACTACTACT	16	
Å 1620	61 GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCCTCCCATGTCTGGGAGC	1 15	
A 1620	61 GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	1 15	
6	01 CCATCATGGACCACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	Db 15	
C 156	01 CCATCATGAACCACCACCTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	<u> </u>	
A 1500	41 ACCAGGCTGTTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGTG	<u> </u>	
G 144	41 ACCAGGCTGTCGTTGAGATCAACATCATCATCATCATCATCATTCAT	<u>, , , , , , , , , , , , , , , , , , , </u>	
144	381 TGGAGGAACTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCTCGCTC	<u> </u>	
C 1380	21 GGTACATGGGCACAGAGTCGGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATC		
C 1380	21 GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATC	1	
T 13	61 TGGCCAACATGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCCTTCAATGG	_	
т 132	1 TGGCCAACATGCTGCGTTGAGGTGGGCGGCCTGGAGTTCCCCAGGGTGCCCCTTCAATGGC	1	
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G 126	01 AACATCCCAAATACGAGTGGTTTCGGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG	ц	
G 12	- IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Db 1:	
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Ov	Db	Qy	ДУ	Db	Qy	Db	Qy	Db	Qy	Db	Qy	Db	Qy	DЪ	Qy	Db	Qγ	Db	Qy	Db	Qy	Db	Qy	Db	Qy	Db	Qy	Db	Qy	Db	Qy	Db	0	Db
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Mammalia; Eutheria; P
1 (bases 1 to 4145)
Geller, D.A., Lowenste
Silvio, M., Wang, S.C.,
                                                                                                                                                     Homo sapiens inducible nitric L09210
                                                                    Eukaryota; Metazoa; Chordata;
                                                                                    Homo sapiens
                                                                                                    Homo sapiens cDNA to mRNA.
                                                                                                                    inducible gene;
                                                                                                                                      L09210.1 GI:292241
                                                                                                                                                                                        HUMINOSA
 Wang, S.C.,
                Lowenstein, C.J.,
                                                                                                                    nitric oxide synthase.
                                                    Primates;
     Nakayama
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                                                                    Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                          oxide
                   Shapiro, R.A.,
                                                     Catarrhini; Hominidae; Homo.
     , D . K . ,
                                                                                                                                                                                          mRNA
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     Simmons, R.L.,
                                                                                                                                                                                            linear
                   Nussler, A.K.,
     Snyder, S.H.
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Molecular cloning and expression of inducible nitric oxide synthase
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YRSRGGCPADMI HUVPPMSGS ITPVFHQEMLNIYVLSPFYYYQVEAMKTHYWQDEKRRP
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PGLGSSMYPRFCAFAHDIDOKLSHIGASOLTPMGEGDELSGQEDAFRSWAYQTFKAACE
TFDVRGKOHIQIPKLYTSNVTWDPHYRLVQDSQPLDLSKALSSMHAKNFTMRLKSR
QNLQSPFSSRATILVELSCEDGGGLNYLPGEFHLGVCPGNQPALVGGILERVVDGPTPH
QTVRLEDDLDEGGSYWMSDKRLPDCLSGALTYSSDTJTPPTQLLLOKLAQVATEEPER
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qyhnlskqqnespqplvetgkkspeslvkldatplssprhvriknwgsgwtfqqtlhh
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/db_xref="taxon:9606"
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1440	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCCGCTCTGGAAAG	1381	Qy
1380 1380	GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCC	1321 1321	рь
1320 1320	TGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT		рь
1260 1260	AACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTG		Db Vy
1200 1200	ATGGCCGTGACCCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG		Оу
1140 1140	ACCTGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA	1081	Ωу
1080 1080	TGCCAGATGGCAGCATCAGAGGGGACCCTGCCAACGTGGAATTCACTCAGCTGTGCATCG	0 0	Оу
1020 1020	ATGGCAAGCACGACTTCCGGGTGTGGAATGCTCAGCTCA	961 961	рь
960	GTTACTCCACCAACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCAGCGGAGTG	0 0	Db Qy
900	TGATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGC 	4 4	Дb
840 840	AGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTCT	8 8	Оy
780 780	AGATAGAAACAACAAGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAAGC	721 721	Db Qy
720 720	GCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGGGTGGAAGCGGTAACAAAGG	661 661	ρ ₀ ο
660	AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGTCAACCAATATTACG	601	Qy Db
600	CAAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCAGGGACA	541 541	Db Qy
540 540	GCGGGATGACTTTCCAAGACACACTTCACCATAAGGCCAAAGGGATTTTAACTTGCAGGT	ထ ထ	Db 94
480 480	. TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA	421 421	Фр
4 20 4 20	AGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAGAAGTCTCCAGAATCTCTGG	361 361	. B. Q
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	CATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAGCATCCTGCCGGGGGAGCTACCTGCCGGGGGAGCATCCTGCCGGGGGAGCAACTACCTGCCGGGGGAGCAAGGCCTGAACTACCTGCCGGGGGAGCATCCCTGGTGGAACTACCTGCCGGGGGAGCAAGGCCTGAACTACCTGCCGGGGGAGCAACTACCTGCCGGGGAGCAACTACCTGCCGGGGAGGACTACCTGCAACTACCTGCCGGGGAACTACCTGCCGGGGAG	4 6	Qy	
CA 2	TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGC	2401 2401	Оy	
ଜ - 2	TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	2341 2341	ОУ	
ã – ã	TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTC	2281 2281	Qу	
$\mathbf{A} - \mathbf{A}$	GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCAC 	2221 2221	Дb	
4-4	AGCTCACCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGC	2161 2161	Дb	
a – a	CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCT	μ	ОУ	
$\alpha - \alpha$	TGAAAGAGCTCAACAACTACAATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGTAC	0 0	Ωy	
ñ-ñ	CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAAACTGAAGAAATCGCTCTTCATG	1981 1981	Qy Db	
$\triangleright - \triangleright$	TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGTGACCAGTA	.92	Qy Db	
D — D	CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA	00 00	Qy Db	
ã → ã	CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAG 	1801 1801	Qy Db	
> - >	AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAG.	1741 1741	Qy Db	
ã − ã	AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACAGAAAGCGGAGACCCAAGAGAAGA	1681 1681	Db	
Õ − Õ	ACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTAT 		Ду Ду	
> - >	GTTCCGTGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	் ப் ப்	Фр	
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á	TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG	1381	Db	

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                                                                CCCACACCCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGGTCGAGG
                                                                                                                    TCCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCCGGGACGTGG
                                                                                                                                                                        CCAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGC
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                                                                                                                                              Submitted (18-JUL-2001) Surgery, University Technology Drive, Pittsburgh, PA 15219, USA
                                                                                                                                                                          Gambotto, A.
Direct Submission
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                                                                                                                                                                                                                                                                                                            artificial sequences;
1 (bases 1 to 35764)
                                                                                                                                                                                                         Shapiro, R., Gao, W.,
                                                                                                                                                                                                                                                   vector encoding the human iNOS cDNA
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                                       adenoviral vector psi5"
/rpt_type=inverted
             /note="terminal
                              1. .103
                                                           iNOS; derived from pAdLox shuttle vector and
                                                                     /organism="Adenoviral expression vector Ad-hiNOS"
/db_xref="taxon:170704"
/note="recombinant human adenovirus type 5 encoding
                                                                                                                               Location/Qualifiers
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BASE COUNT
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                                                                  1384 CAGGATGACCTTCAGTATCACAACCTCAGCAAGCAGCAGAATGAGTCCCCGCAGCCCCTC
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                          ACTCCCAAAAGTTTGACCAGAGGACCCAGGGACAAGCCTACCCCTCCAGATGAGCTTCTA
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GLGSSKY PRECAFAHDIDQKLSHIGASQLTPMGEGDELSGQEDAFRSWAVQTFKAACE
TFDVRGKOH 1Q I PKLYTSNVTWDPHHY RLVQDSQPLDLSKALSSMAKNVFTWRIKSR
QNUQSPTSSRATI I LVELSCEDGQELWYLPGEHLGVCPGNQPALVQGILERVUDGPTPH
QTVRLEDLDESGSYWVSDKRLPPCSLSQALTYSPDITTPPTQLLLQKLAQVATEEPER
QRLEALCQPSETSKWK FYNSPTFLEVLEEFPSLRVSAGFLLSQLPILLKRAFVSISSSR
DHIPTELHLTVAVVTYHTGDGQGPLHIGVCSTWALSIK PQDDPVPCFVRNASAFHLPED
PSHPCILIGPGTGIVPFRSFWQQRLHDSQHKGVRGGRWTLVFGCRRDDEDHIYQEEML
EMAQKGYLHAVHTAYSRLPGKPKYYVDDILRQQLASEVLRVLHKEPPHLYVCGDVRMA
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IRGDPANVEFTOLCIDLGWKRKYGRFDVVPLVLQANGRDPELFEIPDLVLEVAMEHP
KYEWFRELELKWYALFAVANMLLEVGGLEFFOCPFINGWYMGTEIGVROPCDVQRYNIL
EEVGRRINGLETHKLASLMKLDQAVVELNIAVHSFOKONVIXMDHHSAAESFMKYMQNE
YRSRGGCPADWIMLVPPMSGSITPVFHQEMLNYVLSPFYYYQVEAWKHHVWQDEKRRP
KRREIFUKVLYKAVLFACMLNIKTMASRVRVTILFATETGKSEALAWDLGALFSCAFN
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/product="inducible nitric oxide synthase"
/protein_id="AALO2120.1"
/db_xref="GI:15636800"
/translation="MACPWKFLFKTKFHQYAMNGEKDINNNVEKAPCATSSPVTQDDL
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KAKGILTCRSKSCLGSIMTPKSLTRGPRDKFTPPDELLPQAIEFVNQYYGSFKEAKIE
EHLARVEAVTKEIETTGTYQLTGDELIFATKQAWRNAFRCIGRIQWSNLQVFDDARSCS
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/note="SV40 polyadenylation signal"
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3783	CCCCGGACATCACCACACCCCCAACCCA	3724	ДЪ
2726	CCTGCTCACTCAGCCAGGCCCTCACCTACTCCCCGGACATCACCACACACCCCA	2667	Qy
3723	GTGCGCCTGGAGGACCTGGATGAGAGAGTGGCAGCTACTGGGTCAGTGACAAGAGGCTGCCC	3664	Db
2666	TGCGCCTGGAGGACCTGGATGAGAGTGGCAGCTACTGGGTCAGTGACAAGAGGCTGCC		Qy
3663	CCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGGTGGATGGCCCCACACCCCACCCGACCA	3604	Db
2606	CGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGGTGGTGGATGGCCCCACACACCCCACAGAC	2547	Qy
3603	GATGGCCAAGGCCTGAACTACCTGCCGGGGGAACCTTGGGGTTTGCCCAGGCAACCAG	3544	Db
2546	ATGGCCAAGGCCTGAACTACCTGCCGGGGGGGGCACCTTGGGGCTTTGCCCCAGGCAACCAG	2487	Qy
3543	CAGAATCTACAAAGTCCGACATCCAGCCGTGCCACCATCCTGGTGGAACTCTCCTGTGAG	3484	Дb
2486	AGAATCTACAAAGTCCGACATCCAGCCGTGCCACCATCCTGGTGGAACTCTCCTGTGAG	2427	Qγ
3483	AGCAAAGCCCTCAGCAGCATGCATGCCAAGAACGTGTTCACCATGAGGCTCAAATCTCGG	3424	Ър
2426	GCAAAGCCCTCAGCAGCATGCATGCCAAGAACGTGTTCACCATGAGGCTCAAATCTCGG	2367	Qγ
3423	AATGTGACCTGGGACCCGCACCACTACAGGCTCGTGCAGGACTCACAGGCCTTTGGACCTC	3364	Db
2366	ATGTGACCTGGGACCCGCACCACAAGGCTCGTGCAGGACTCACAGCCTTTGGACCTC	2307	Qy
3363	TGTGAGACGTTTGATGTCCGAGGCAAACAGCACATTCAGATCCCCAAGCTCTACACCTCC	3304	В
2306	GTGAGACGTTTGATGTCCGAGGCAAACAGCACATTCAGATCCCCAAGCTCTACACCTCC	2247	Qy
3303	GAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCTGGGCCGTGCAAACCTTCAAGGCAGCC	3244	Дb
2246	AGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCTGGGCCGTGCAAACCTTCAAGGCAGCC	2187	Qy
3243	ACCCCGATGGGAGAAGGGGAT		DЬ
2186	TTGATCAGAAGCTGTCCCACCTGGGGGCCTCTCAGCTCACCCCGATGGGAGAAGGGGAT		Qy
3183	TTCTG	3124	Db
2126	ACGCTGTGTTTGGCCTCGGCTCCAGCATGTACCCTCGGTTCTGCGCCCTTTGCTCATGA	2067	Qy
3123	ATGGAGAAACTGAAGAAATCGCTCTTCATGCTGAAAGAGCTCAACAACAACTTCAGG	3064	рь
2066	ATGGAGAGAAACTGAAGAAATCGCTCTTCATGCTGAAAAGAGCTCAACAACAAATTCAGG	2007	Qy
3063	GGAGACTGCCCTGGC	3004	Ф
2006	AGGAGGAACGGCTGCTGTTGGTGGTGACCAGTACGTTTGGCAATGGAGACTGCCCTGGC	1947	Ωу
3003	TTCAGCTGTGCCTTCAACCCCAAGGTTGTCTCCATGGATAAGTACAGGCTGAGCTGCCTG	2944	Db
1946	TCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCATGGATAAGTACAGGCTGAGCTGCCTG	1887	Qy
2943	ATCCTCTTTGCGACAGAGACAGGAAAATCAGAGGCGCTGGCCTGGGACCTGGGGCCCTTA	2884	Db
1886	TCCTCTTTGCGACAGAGACAGGAAAATCAGAGGCGCTGGGCCTGGGACCTGGGGGCCTTA	1827	Qy
2883	GCTGTGCTCTTTGCCTGTATGCTGATGCGCAAGACAATGGCGTCCCGAGTCAGAGTCACC 2	2824	Db
1826	CTGTGCTCTTTGCCTGTATGCTGATGCGCAAGACAATGGCGTCCCGAGTCAGAGTCACC	1767	Qy
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1766	ASTEDATORAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	1707	Ş

3784 CTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAGAAGAGCCTGAGAGACAGAGACTGGAG 3843

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                                                          CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC
                                                                                               CCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAGTATCACAACCTCAGCAAGC
                                                                                                                                       AATTCCACCAGTATGCAATGAATGGGGAAAAAGACATCAACAACGATGTGGAGAAAGCCC
                                                                                                                                                            AATTCCACCAGTATGCAATGAATGAGGGAAAAAGACATCAACAACAATGTGGAGAAAAGCCC
                                                                                                                                                                                                                  GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA
                                                                                                                                                                                                                                         GTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGGAAATTTCTGTTCAAGACCA 240
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                                                                                                                                                                                                                                                                                               AGCCAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAAATCCAGATAAGTGACATAA 199
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Other
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Moncada, S.E., Charles, I.G. and Palmer, R.M.
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YRSRGGCPADWIMLYPMSGSITPVFHQEMLNYVLSPFYYYQVEAWKTHVWQDEKRRP
KRREIPLKVLVKAVLFACMLMRKIMASRVRVTILFATETGKSEALAWDLGALFSCAFN
PKVCMDKYKLSCLEEERLLLLVTSTEGNGDCDEOGGEKKKSLFMLKELNNKFRYAVF
GLGSSMYPRFCAFAHDIDQKLSHLGASQLTPMGEGDELSGQEDAFRSWAVQTFKAACE
TFDVRGKOHIQIFKLYTSNYTWDPHHYRLVQDSQPLDLSKALSSMHAKNVFTMRLKSR
QNLGSPTSSRATILVELSCEDGGCLNTLPGEHLGVCDGNQPALVOGILERVVDGFTPH
QTVRLEALDESGSYWYSDKRLEPCSLSQALTYFLDITTPPTQLLLQKLAQVATEEPFB
DHIPTEIHLTVAVVTYHTRDGQGPLHGVCSTWLNSLKPQDDVCTVRASGFHLPED
DHIPTEIHLTVAVVTYHTRDGQGPLHGVCSTWLNSLKPQDDVCTVRASGFHLPED
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EMAQKGVLHAVHTAYSRLPGKPKVYVQDILRQQLASEVLRVLHKEPGHLYVCGDVRMA
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/db_xref="GI:2296176"
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/db_xref="taxon:9606"
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TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGGAAAG
                                                                                                                                                 GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCC
                                                                                                                                                                                                                            TGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTTCCCAGGGTGCCCCTTCAATGGCT 1320
                                                                                                                                                                                                                                                                                                                                                                                                                        ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGGTCCCCCTGGTCCTGCAGGCCA 1140
                                                                                                                              GGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATCC
                                                                                                                                                                                               TGGCCAACATGCTTGAGGTGGGGGGGGCCTTGGAGTTCCCCAGGGTGCCCCTTCAATGGCT
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2521 ACCTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGG 2580	Ф
2461 CCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAGC 252 	Оу
2401 TGTTCACCATGAGGCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCCA 246 	Qy
2341 TGCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	Qy Db
2281 TTCAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTCG 234	Qy Db
2221 GGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA 228	Оу
2161 AGCTCACCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCT 222	Qy Db
2101 CTCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTCTC 2160	Оу Db
2041 TGAAAGAGCTCAACAACAACTCAGGTACGCTGTGTTTTGGCCTCGGCTCCAGCATGTACC 2100	Qу
1981 CGTTTGGCAATGGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCATGC 2040 	Qу
1921 TGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAGGACGGCTGCTGTTGGTGGTGACCAGTA 1980	Qу
1861 CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA 1920	ОУ
1801 CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAGG 1860 	Фф
1741 AGATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAGA 1800 	Qу 1 рь 1
1681 AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAAGAG 1740	Qy 1
1621 TCACCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATC 1680	Qy]
1561 GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC	Qy 1
1501 CCATCATGGACCACCACCCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	Qy 1 Db 1

3720	CGCTCTGAGGGCCTACAGGAGGGGTTAAAGCTGCCGGCACAGAACTTAAGGATGGAGCCA	3661	Qy
3679	CCTGGAGATGTCA	3620	Db
3660	TCCTTACGAGGCGAAGAAGGACAGGGTGGCGGTGCAGCCCAGCAGC	3601	Qy
3619	CAGAAGCGCTATCACGAAGATATCTTTGGTGCTGT	3560	Db
3600	CTATTTCTTTCAGCTCAAGAGCCA	3541	Qy
3540	CCCACACCCTGAAGCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGGTCGAGG	3481 3500	Qy Db
4 9	CCACAAGGAGCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACGTG	3440	Db
4.8	TCCACAAGGAGCCAGCCCACCTCTATGTTTGCGGGGATGTGCCGCATGGCCCCGGGACGTGG	Ν	Qу
3439	CAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTG		Db
	CCAAGGTCTATGTTCAGGACATCCTGCGGCAGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGC	3361	Qy
3379	ACAGCCTATTCCCGCCTGCCTGGCAAG		Db
3360	GGCCCAGAAGGGGGTGCTGCATGCGGTGCACAC	3301	Qy
3319	GTGCCGCCGAGATGAGGACCACATCTACCAGGAGGAGATGCTGGAG		Db
3300	GETGTTTGGGTGCCGCCCCC	N	Qy
3259	GCTCCATGACTCCCAGCACAAGGGAGTGCGGGGAGGCCGCATGACC	3200	Db
3240	CTGGCAGCAACGGCTCCATGACTCCCCAGCACAAGGGAGTGCGGGGAGG		Qy
3199	GCACAGGCATCGCGCCCTTCCGCAGT	3140	DЬ
3180	TCCCTCCCATCCTTGCATCCTCATCGGGCCTG	3121	Оy
3139	AGCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGGCTTCCACCTCCCCGAGG	0	Db
3120	GCCCCAAGACCCAGIGCCCIGCTITGIGCGGAAIGCCAGCGCCIIICCACCIICCCCGA	3061	Qy
3079	CCCGAGATGGCCAGGGTCCCCTGCACCACGGCGTCTGCAGCACATGGCTCAACAGCCTGA	3020	Db
3060	CGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCCTCAACAGCCTGA	0	Qy
3019			Db
3000	CTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCACA	2941	Qy
2959	CTGCTGGCTTCCTGATCTCCCAGCTCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCT	9	Db
2940	TGCTGGCTTCCTGCTTTCCCAGCTCCCCATTCTGAAGCCCCAGGTTCTACTCCATCAGCT	2881	Qy
2899		84	Db
2880	GTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGT	2821	Qy
2839	CCTCAGAGTACAGCAAGTGGA	2780	Db
2820	AGAGCCTGAGAGACAGAGGCCCTGGAGGCCCTCAGAGTACAGCAAGTGGA	2761	Qy
2779	CTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAG	2720	Db
2760	GACATCACCACACCCCCAACCCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCAACAC	2701	Qy
2719	ACTGGGTCAGTGACAAGAGGCTGCCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTTCC	660	Db
2700	CTGGGTCAGTGACAAGAGGCTGCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCCC	641	γO
65	TGGATGGCCCCACACCCACAGACAGTGCGCCTGGAGGCCCTGGATGAGAGTGGCAGCT 2	600	Db 45
2640	GGATGGCCCCACACCCCACCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGC	2581	0 v

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SOURCE
ORGANISM
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1 (bases 1 to 4164)

Charles,I.G., Palmer,R.M., Hickery,M.S., Bayliss,M.T., Chubb,A.P.
Hall,V.S., Moss,D.W. and Moncada,S.

Cloning, characterization, and expression of a cDNA encoding an inducible nitric oxide synthase from the human chondrocyte Proc. Natl. Acad. Sci. U.S.A. 90 (23), 11419-11423 (1993)
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/codon_start=1
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226. .3687
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226. .3687
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                                                    /gene="INOS"
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                                                                                                                                                                                                        (23-APR-1993) I. Charles, Wellcome Research Laboratories, Deot. of Cekk Biology, Langley Park, Beckenham, Kent, BR3
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679

541 CCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTGACCAGAGGACCCCAGGGACA

600

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                                                                        TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA 480
                                            TCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTGAGGATCAAAAACTGGGGCA
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ORIGIN

661 GETCETTEMANCANGEANANATRAGGGANCATETGGCCAGGGTGGANGCGTANCANAGG 721 1680 GETCETTEMANACANCANCASCANCTRACANAGG 721 1680 GETCETTEMANACANCANCASCANCTRACACTGGCCAGGGTGGANGCGTANCANAGG 732 1721 AGATTGGANACANCANCANCANCANCTRACTCGCCAGGGTGGANGCTGCANCGTANGGCTANCTRACANCANCANCANCANCANCANCANCANCANCANCANCAN	SEC GCTCCTTCAAAGGGGCAAAAATTAGGGGAACATCTGGCCAGGGTGGAAGGGGTAACAAAGG CCTCCCTTCAAAGGGGCAAAAATTAGAGAACATCTGGCCCAGGGTGGAAGGGGTAACAAAGG CCTCCCTTCAAAGGGGAAAAATTAGACGAAAGGAACTGGCCCACCAAAGGAACGGCTAACAAAGGAACTGCCCCTTCAAAAATTAGACGAAAATTAGACGAAAATTAGACGAAAATTAGACGAAAACGAACG	Qy Db	pb es	₽ B	Qy	Qy Db	Оу	da V	рb	Qy	Qy Db	ф	ργ	\$ 8	Оу	Qy Db	Qy	Qу Db	ОУ	Qу	Db.	Qу	
CTOCCTTCAAAGAGGCAAAAATRAGAGAACATCTGGCCCAGGGTGGAAGGGGTAACAAAGG 72 CTOCCTTCAAAGAGGCAAAAATRAGAGAACATCTGGCCCAGGGTGGAAGGGGTAACAAAGG 72 CTOCCTTCAAACAACAGCAAAATRAAGGAACATCTGGCCAAGGGGTGAAACAAAGG 73 GATAGAAACAACAGCAAACTTGCACCGGAATTGGGCAAGTGGACCTCATCTTCCAACCTGCAGCTGTACAAAGGTGGAAGCAGCAAACAGGTGTTCAACCAAC	CTCCTTCAAAGAGGCAAAAATTAGAGGAACATCTTGGCCAGGGTGGAAGGGGTTAACAAAGG 720 CTCCTTCAAAGAGGGCAAAAATTAGAGGAACATCTGGCCAGGGGTGGAAGGGGTTAACAAAGG 720 CTCCTTCAAAGAGGAACCTACCAACTTGGAACACTCGCCAGGGGAACACGGTTAACAAAGG 730 CTCCTTCAAACGAAACCTACCAACTTGAACACACCTGCAAGGAACACCTTCAATTGGCCAACAACCTACTTGGAAACCAACC	70	64	2 6	.56	50	4 4	40	340	321	261 280	220	201	141	081	021 040	61	01	41	81 00	21	61	
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	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	GGACGAGAAGCGGAGACCCAAGAGAACAG 		TTGGCTGGTCCCTCCCATGTCTGGGAGCA L CTACGTCCTGTCCCCTTTCTACTACTATC 1	TTGGCTGGTCCCTCCCATGTCTGGGAGCA 1	TTCATGAAGTACATGCAGAATGAATACC 1 TTCATGAAGTACATGCAGAATGAATACC 1	ATCCATAGITITCASANCASAN SISA 1	ACGCACAAGCTGGCCTCGCTCTGGAAAG 1	TTCTGTGACGTCCAGCGCTACAACATCC 1 ACGCACAAGATGCTCTCGCTAGAAAG 1	TTCTGTGACGTCCAGCGCTACAACATCC 1	GAGTTCCCAGGGTGCCCCTTCAATGGCT 1	GAGCTAAAGTGGTACGCCCTGCCTGCAG 1	GAGCTAAAGTGGTACGCCCTGCCTGCAG 1	CCTGACCTTGTGCTTGAGGTGGCCATGG 1	GATGTGGTCCCCCTGGTCCTGCAGGCCA 11 	AACGTGGAATTCACTCAGCTGTGCATCG 10	CAGCTCATCCGCTATGCTGGCTACCAGA 1 	GCCATCACCGTGTTCCCCCAGCGGAGTG 9	TGTTTGAACACATCTGCAGACACGTGC 90 	GGATCCAGTGGTCCAACCTGCAGGTCT 84 	GAGATGAGCTCATCTTCGCCACCAAGC 78	TGGCCAGGGTGGAAGGG 72 	

2880	AGTTCACCAACAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCCGTCCCTGCGGGTGT	2821	Qy
2839	GCTGGAGGCCCTGTGCCAGCCCTCAGAGTACAGCAAGTGG	2780	Db
2820	AGAGCCTGAGAGACAGAGGCTGGAGGCC	2761	Qy
2779	GACATCACCACACCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACA	2720	σb
76	CGGACATCACCACACCCCCAACCCCAGCTGCTCCTAAAAGCTGGCCCAGGTGGCCACAG	2701	Qy
71	ACTROGETCAGIOACACACACACTEC CONTROL I I I I I I I I I I I I I I I I I I I	2660	qq
70	GGATGGCCCCACACCCCACAGACAGACAGAGAGCGCCAGAGAGAGAGAGACAAAAAA	. 0) Db
2640 2659	TGGATGGCCCACACCCACAGACAGTGCGCCTGGAGGACCTGGATGAAGAGTGGCAGCT 	58	Qy Qy
59	CTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGTATCCTGGAGCGAGTG	2540	Db
58	ACCTTGGGGTTTGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGG	(Ji	Qy
2539	CCTGTGAGGATGGCCAAGGCCTGAACTACCTGCCGGGGGAG	2480	Db
	CATCCTGGTGGAACTCT	2461	Qy
2479	GCTCAAATCTCGGCAGAATCTACAAAGTCCGACATCCAGCCGTGCC	2420	DЬ
6	GTTCACCATGAG	4	Qy
2419	CTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	2360	Db
0	GCAGGACTCACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCAT	w	Qy
	CCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACTACAGGCTCG	2300	Db
	CAGATCCCCAAGCTCTACACCTCCAATGTGACCTGGGACCCGCACCACCTACAGGCTCG	281	Оу
2299	ACGTTTGATGTCCGAGGCAAACAGCACA	240	Db
2280	GGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGATGTCCGAGGCAAACAGCACA	μ.	Qy
	GGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCT	0	DЬ
2220	CTCACCCCGATGGGAGAAGGGGATGAGCTCAGTGGGCAGGACGACGCCTTCCGCAGCT	161	Qy
2179	GTCCCACCTGGGGGCCTCTC	0	DЬ
2160	TCGGTTCTGCGCCTTTGCTCATGACATTGATCAGAAGCTGTCCCCACCTGGGGGCCTCTC	101	Qy
2119	ATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGTACC	060	Db
	AAAGAGCTCAACAACAAATTCAGGTACGCTGTGTTTGGCCTCGGCTCCAGCATGTACC	041	Qy
2059	TCTTCATGC	000	Db
2040	GTTTGGCAATGGAGACTGCCCTGGCAATGGAGAGAAACTGAAGAAATCGCTCTTCATGC	981	Qy
1999	CTGCCTGGAGGAACGGCTGCTGCTTGGTGACCAGT	940	Db
9	GGATAAGTACAGGCTGAGC		Qy
1939	GCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGC	1880 c	Db
é	GCTGGCCTGGGGCCTTATTCAGCTGTGCC	861	Qy
1879		œ	Db
æ	AATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAATCAGAG	.801	Qy
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'n	GATTCCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTTGCCTGTATGCTGATGCGCAAG	1741 8	Qy

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Thispen,A., Hohmeler,H.-E., Newgard,C.B., Unger,R.H.,
Shimabukuro,M., Chen,G., Rhodes,C.J., Hugl,S.R. and Cousin,S.
Methods and compositions relating to no-mediated cytotoxicity
Patent: US 6171856-A 11 09-JAN-2001;
Location/Qualifiers
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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Park,C.S., Park,R. and Krishna,G.
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                QYHNLSKQQNESPQPLYETGKKSPESLVKLDATPLSSPRHYRLKNWGSGMTFQDTLHH
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/chromosome="17"
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synthase (NOS) mRNA, complete
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BASE COUNT ORIGIN

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Matches 4031; Query Match polyA_site 102 TACCCCGGGGAGGCAGTGCAGCCAGCTGCAAGCCCCCACAGTGAAGAACATCTGAGCTCAA 161 241 TATCACAACCTCAGCAAGCAGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAG Local Similarity 1 TACCCCGGGGAGGCAGTGCAGCCAGCTGCAAGCCCCACAGTGAAGAACATCTGAGCTCAA 60 ATCCAGATAAGTGACATAAGTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGG 120 ATCCAGATAAGTGACATAAGTGACCTGCTTTGTAAAGCCATAGAGATGGCCTGTCCTTGG 221 AAGTCTCCAGAATCTCTGGTCAAGCTGGATGCAACCCCATTGTCCTCCCCACGGCATGTG 461 AACAATGTGGAGAAAGCCCCCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAG AACAATGTGGAGAAAGCCCCCTGTGCCACCTCCAGTCCAGTGACACAGGATGACCTTCAG 341 TATCACAACCTCAGCAGCAGCAGAATGAGTCCCCGCAGCCCCTCGTGGAGACGGGAAAG 401 GGGATTTTAACTTGCAGGTCCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTG 581 AGGATCAAAAACTGGGGCAGCGGGATGACTTTCCAAGACACTTCACCATAAGGCCAAA 420 AGGATCAAAAACTGGGGCAGCGGGATGACTTTCCAAGACACACTTCCACCATAAGGCCCAAA CTCATCTTCGCCACCAAGCAGGCCTGGGCCAATGCCCCACGCTGCATTGGGAAGGATCCAG 821 GTGGAAGCGGTAACAAAGGAGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAG 761 TTTGTCAACCAATATTACGGCTCCTTCAAAGAGGCAAAAATAGAGGAACATCTGGCCAGG 701 GGGATTTTAACTTGCAGGTCCAAATCTTGCCTGGGGTCCATTATGACTCCCAAAAGTTTG TGGTCCAACCTGCAGGTCTTCGATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAA 881 CTCATCTTCGCCACCAAGCAGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGGATCCAG ACCAGAGGACCCAGGGACAAGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAA 641 966 Conservative þ GLGSSMYPRECAPAHDIDQKLSHLGASQLTPYGEGDELSGQEDAFRSWAVQUFKAACE
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GGCTG 1961 GGCTG 1860	1902 AACCCCAAGGTTGTCTGCATGGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAAC	Qy Db
CCTTC 1901 CCTTC 1800	1842 GAGACAGGAAAATCAGAGGCGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTG	Qy
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TCCTG 1661	602 CCTCCCATGTCTGGGAGCATCACCCCCGTGTTTCACCAGGAGATGCTGAACTACG 	Оу
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TAGT 1481 TAGT 1380	1422 CTGGCCTCGGTCTGGAAAGACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCA	Qу ДЪ
ACAAG 1421 ACAAG 1320	362 GTCCAGCGCTACAACATCCTGGAGGAAACTGGGCAGGAGAATGGGCCTGGAAACGC 	Оу
TGAC 1361 TGAC 1260	1302 GGGTGCCCCTTCAATGGCTGGTACATGGGCACAGAGATCGGAGTCCGGGACTTCTG	Оу
CCCA 1301	1242 TGGTACGCCCTGCCTGCAGTGGCCAACATGCTGCTTGAGGTGGGCGGCCTGGAGTT	Qу
AAAG 1241 AAAG 1140	1182 GTGCTTGAGGTGGCCATGGAACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCT	Qy Db
ACCTT 1181 ACCTT 1080	1122 CCCCTGGTCCTGCAGGCCAATGGCCGTGAGCCCTGAGCTCTTCGAAATCCCACCTGA 	Qу
GGTC 1121 GGTC 1020	1062 TICACTCAGCTGTGCATCGACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGT	Qу Дъ
GGAA 1061 GGAA 960	1002 CGCTATGCTGGCTACCAGATGCCAGATGGCAGCATCAGAGGGGGACCCTGCCAÂACGT 	Qу Дъ
CATC 1001 CATC 900	42 GTGTTCCCCCAGCGGAGTGATGGCAAGCACGACTTCCGGGTGTGGAATGCTCAGCT 	Оу
CACC 941 CACC 840	882 CACATCTGCAGACACGTGCGTTACTCCACCAACAATGGCAACATCAGGTCGGCCAT	ДУ

3101	QY 3042 ACATGGCTCAACAGCCTGAAGCCCCAAGACCCAGTGCCCTGCTTTGTGCGGAATGCCAGC :	,o
2940	1881 GCCGTGGTCACCTACCACACCCGAGATGGCCAGGGTCCCCTGCACCACGGCGTCTGCAGC	ō
3041	82 GCCGTGGTCACCTACCACACGGAGATGGCCAGGGTCCCCTGCACCACGGTGTCTGCAGC	O
2981 2880	**2 AGGTTCTACTCCATCAGCTCCTCCCGGGATCACACGCCCACGGAGATCCACCTGACTGTG	<u> </u>
2820	2761 TTCCCGTCCCTGCGGGTGTCTGCTGCTTCCCAGCTTCCCAGCTCCCCATTCTGAAGCCC	ם כ
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5 5	442 CCGACATCCAGCCGTGCCACCATCCTGGTGGAACTCTCCTGTGAGGATGGCCAAGGC	0
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2280	2221 CCGCACCACTACAGGCTCGTGCAGGACTCACA	\ _
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H 1	Db 2101 GAGGACGCCTTCCGCAGCTGGGCCGTGCAAACCTTCAAGGCAGCCTGTGAGACGTTTGAT	_
א כ	2202 GAGGACGCCTTCCGCAGCTGGGCCGTGCAAACCTTCAAGGCAGCCTGTGTGAGACGTTTT	_
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dedifferentiated human ventricular cardiac myocytes express inducible nitric oxide synthase mRNA but not protein in respectively. TNF, IFNgamma, and LPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 4150)
Luss,H., Lil.R.-K., Shapiro,R.A., Tzeng,E., McGowan,F.X.,
Yoneyama,T., Hattakayama,K., Geller,D.A., Mickle,D.A.G.,
Simmons,R.L. and Billiar,T.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (26-MAY-1998) Pharmacology, Westf.Wilhelms-Univ Domagkstr. 12, Munster D-48149, Germany
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 (bases 1 to 4150)
LUSS,H., Li.R.-K., Shapiro,R.A., Tzeng,E., McGowan,F.X.,
Yoneyama,T., Hattakayama,K., Geller,D.A., Mickle,D.A.G.,
Simmons,R.L. and Billiar,T.R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AF068236.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cell. Cardiol. 29 (4), 1153-1165 (1997)
                                                                                                                       EHLARVEÄVTKEIETTGTYQLIGDELIFATKQAMRNAPRÖIGRIQMSNLOVPDARSCS
TAREMEHICHURYSTNNGNIRSATTVFPQRSDSKHBPFVWANDLIHYAGYQMPDGS
IRGDPANVETTQLCIDLGMKPKYGREFQVVPLVLQANGRDPELFEIPPDLVLEVAMEHP
KYEMFRELELKWYALFAVANMLLEVGGLEFPGCPFNGWYMGTEIGVRDFCDVQRYNIL
EEVGRRWGLETHKLASLMKDAVEINIAUTULHFYGKONVTINHHSTAESFMKYMQNE
YRSRGGCPADMIMLVLPSGSTIPVEHQEMLNVVLSPFYYYQVEAMKTHWQDEKKROP
KRREIPLKVLYKAVLEACMLMRKTMASRYRVIILFANFETGKSBLANDLGALFSCAFN
KRREIPLKVLYKAVLEACMLMRKTMASRYRVIILFANFETGKSBLANDLGALFSCAFN
QNLQSPTSSRATILVELSCEDGQGLNYLPGEHLGVCPGNQPALVQGILERVVDGPTPH
QTVRLEALDESGSYWVSDKRLPPCSLSQALTYFLDITTPPTQLLLQKLAQVATEEPER
                                                                      PKVVCMDKYRLSCLEEERLLLVVTSTFGNGDCDGNGEKLKKSLFMLKELNNKFRYAVF
GLGSSMYPRFCAFAHDIDQKLSHLGASQLTPMGEGDELSGQEDAFRSWAVQTFKAACE
                                                                                                                                                                                                                                                                                                           QYHNLSKQQNESPQPLVETGKKSPESLVKLDATPLSSPRHVRIKNWGSGMTFQDTLHH
KAKGILTCRSKSCLGSIMTPKSLTRGPRDKPTPPDELLPQAIEFVNQYYGSFKEAKIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="NOS"
235. .3696
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                                                   TFDVRGKQHIQIPKLYTSNVTWDPHHYRLVQDSQPLDLSKALSSMHAKNVFTMRLKSR
                                                                                                                                                                                                                                                                                                                                                                                       /protein_id="AAC19133.1"
/db_xref="GI:3192917"
                                                                                                                                                                                                                                                                                                                                                                                                                                        /product="inducible nitric oxide synthase"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="NOS"
                                                                                                                                                                                                                                                                                                                                                                 translation="MACPWKFLFKTKFHQYAMNGEKDINNNVEKAPCATSSPVTQDDL/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="NOS II"
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                                                                                                                                                                AGATAGAAACAACAGGAACCTACCAACTGACGGGAGATGAGCTCATCTTCGCCACCAACC
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 TCGATGCCCGCAGCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGC
                                                                       AGGCCTGGCGCAATGCCCCACGCTGCATTGGGAGGATCCAGTGGTCCAACCTGCAGGTCT
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DHTPTEIHLTVAVVTYHFRDGOGPLHHGVCSTWLNSLKPODPVFCYRNASGFHLPED
PSHPCILIGEGTGIAFRSFWOORLEHDSOLKGVRGGRWFLVFGCRRPDEDHIYOGEAL
EMAOKGVLHAVHTAYSRLPGKPKVYVODILROQLASEVLRVLHKEPGHLYVCGDVRMA
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2008	GATAAGTACAGGCTGAGCTGCCTGGAGGAAGGAACGGCTGCTGGTGGTGACCAGTA	Db 19	
1980	GGATAAGTACAGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGGTGACCAGTA	و	
1920 1948	61 CGCTGGCCTGGGACCTGGGGGCCTTATTCAGCTGTGCCTTCAACCCCAAGGTTGTCTGCA	σ α	
88	CAATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCTACAGAGACAGGAAAATCAGAGG	18	
86	AATGGCGTCCCGAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAGGAAAAATCAGAGG	8	
1800 1828	41 AGATTICCATTGAAAGTCTTGGTCAAAGCTGTGCTCTTTTGCCTGTATGCTGATGCGCAAGA [1	7	
1768	09 AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCAAGAGAAAACAGA	17	
1740	81 AGGTAGAGGCCTGGAAAACCCATGTCTGGCAGGAGAGAGA	δ	
1680 1708	21 TCACCCCCGTGTTTCACCAGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTATC	Qy 16	
1648	89 GGTCCCGTGGGGCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCC		
1620	61 GGTCCCGTGGGGGCTGCCCGGCAGACTGGATTTGGCTGGC	ш	
58		_ 	
56	01 CCATCATGGACCACCACCTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAATGAAT	Qу 15	
1528	σ	Db 14	
л	41 ACCAGGCTGTCGTTGAGATCAACATTGCTGTGATCCATAGTTTTTCAGAACCAGAG	L	
4 6	0	Db 14	
4	81 TGGAGGAAGTGGGCAGGAGAATGGGCCTGGAAACGCACAAGCTGGCCTCGCTCTGG	<u> </u>	
1408	4	<u> </u>	
, L	21 GGTACATGGGGACAGAGAGATGGGGGGGGGGGGGGGGGG		
ν ω 2	bi TegccaacaTecTectTegaggTeggCcgcCCTggagGTTCCCAgggTgCcCCTTCaaTggCT	Оу 12 Db 12	
1288	29 AACATCCCAAATACGAGTGGTTT	<u> </u>	
1260	01 AACATCCCAAATACGAGTGGTTTCGGGAACTGGAGCTAAAGTGGTACGCCCTGCCTC		
22	169 ATGGCCGTGACCTGAGCTCTTCGAAATCCCACCTGACCTTGTGCTTGAGGTGGCCATGG	Db 1:	
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Treatment of viral influenza with antisense oligonucleotides
Patent: WO 0078946-A 2 28-DEC-2000;
Eastern Virginia Medical School (US)
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AX067221
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927 AGGTGGCCARCACGTGTTCCCCCAGCGGAGTGATGGCAACCACGACTTCCGGGTGTGG 927 AGGTCGGCCARCACGACGTGTTCCCCCAGCGGAGTGATGGCAACCACGACTTCCGGGTGTGG 928 AATGCTCAGCTCATCCGCTATCCTGGCTACCAGAGTGATGGCAAGCACGACTTCCGGGTGTGG 929 AATGCTCAGCTCATCCGCTATGCTGGCTACCAGAGTGACCAGATGGCAACGACTACAGAGGGAC 11111111111111111111111111111		.227 GAACTGGAGCTAAAGTGGTACGCCCTGCCTGCAGTGGCCAACATGCTGCTTGAGGTGGG 	
27 AGGTGGCCATCACCGTGTTCCCCCAGCGGAGTGATGGCAAGCACGACTTCCGGGTGTGG 1		61 ATCCCACCTGACCTTGTGCTTGAGGTGGCCATGGAACATCCCAAATACGAGTGGTTTCG	DЪ
927 AGGTCGGCCATCACCGTGTTCCCCCAGCGGAGTGATGGCAAGCACGACTTCCGGGTGTGG 1 1 1 1 1 1 1 1 1 1	⊢	167 ATCCCACCTGACCTTGTGCTTGAGGTGGCCATGGAACATCCCAAATACGAGTGGTTTC	
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             267 GAAAAAGACATCAACAACGATGTGGAGAAAGCCCCCTGTGCCACCTCCAGTCCAGTGACA 326
                                           Submitted (20-JAN-1995) Serpil C. Erzurum, Pulmonary & Critical Care Medicine, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Continuous nitric oxide synthesis by inducible nitric oxide synthase in normal human airway epithelium in vivo Proc. Natl. Acad. Sci. U.S.A. 92 (17), 7809-7813 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human inducible nitric oxide synthase mRNA, complete
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Eutheria; Primates; Catarrhini; Hominidae; Homo.
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.G 2486 .G 2280	?7 CAGAATCTACAAAGTCCGACATCCAGCCGTGCCACCATCCTGGTGGAACTCTCCTGTGA 	Qy 242 Db 222	
3G 2426 - 1G 2220	** AUCAPAGE CUTTAGUAGUATGUATGUARGAAGATGTTAACCATGAGGTTAAATCTCG	Db 216	
C 2366		. 2 !	
C 210	GTGAGACGTTTGATGTCCGAGGCAAACAGCACATTCAGATCCCCCAAGCTCTACACCTC	20	
C 23	47 TGTGAGACGTTTGATGTCCGAGGCAAACAGCACATTCAGATCCCCAAGCTCTACACCTC	22	
CC 2246	8/ GAGCTCAGTGGGCAGGAGGACGCCTTCCGCAGCTGGGCCGTGCAAACCTTCAAGGCAGC	Db 198	
AT 1980		19	
.C 192	61 TACGCTGTGTTTTGGCCTCGCCTCATTTTTTTGTGCTTTTTTGTCTTTTTGTCTTTTTTTT	. 18	
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GG 2066 - GG 1860		Db 18	
80	41 GAGGAGGACGCTGCTTGGTGGTGACCAGTACGTTTGGCAATGGAGACTGCCCTG	17	
C 200	47 GAGGAGGAACGGCTGCTGGTGGTGGTGACCAGTACGTTTGGCAATGGAGACTGCCCTG	19	
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A Loa	87 TTCA6CTGTGCCTTCAACCCTAACCCTATTTCCTCTCTCAACCTTGCCTATTCCAACCTTGCCTCAACCTTGCAACCTTGCAACCTTCAACCTTGCAACCTTTGCAACCTTCAACCTTCAACCTTCAACCTTCAACCTTCAACCTTCAACCTTCAAC	œ	
A 188	827 ATCCTCTTTGCGACAGAGACAGGAAAATCAGAGGCGCTGGCCTGGGACCTGGGGGCCTT 521 ATCCTCTTTGCGACAGAGACAGGAAAATCAGAGGCGCTTGGCTGGC	18	
C 162	61 GC	15	
C 182	67 GCTGTGCTCTTTGCCTGTATGCTGATGCGCAAGACAATGGCGTCCCGAGTCAGAGTC	<u>د ب</u>	
AA 1766 AA 1560	07 TGGCAGGACGAGAAGCGGAGACCCAAGAGAAGAGAGTTCCATTGAAAGTCTTGGTCA 	– –	
TC 1500		Db 14	
170	47 CTGAACTACGTCCTGTCCCCTTTCTACTACTATCAGGTAGAGGCCTTGGAAAACCCATC	щ.	
TG 1646	81 TGGATTTGGCTGGTCCCTCCCATGTCTGGGAGCATCACCCCCGTGTTTCACCAGGAGA		
AC 138	*21 GAATCCTTCATGAAGTACATGCAGAATGAATACCGGTCCCGTGGGGGCTGCCCGGCAG	- -	
- >	27 GAATCCTTCATGAAGTACATGCAGAATGAATACCGGTCCCGTGGGGGCTGCCCGGCAC	. ب	
CA 1320	CTGTGCTCCATAGTTTCCAGAAGCAGAATGTGACCATCATGGACCACCACTCGGCTG	1	
CA 152	TTCAGAAGCAGAATGTGACCATCATGGACCACCACTCGGCTG	1	
TT 126		Db 1;	
	TGGAAACGCACAAGCTGGCCTCGCTCTGGAAAGACCAGGCTGTCGTTGAGATCAACA	Qy 1,	

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                                                                                                        Submitted (18-JAN-1994) Atsushi Hokari, Jikei University School Medicine, Tokyo, Department of Internal medicine, Division of Gastroenterology and Hepatology; 3-25-8 Nishishimbashi, Minato, Tokyo 105-0003, Japan (E-mail:hokari_a@jikei.ac.jp, Tel:03-3433-1111, Fax:03-3435-0569)
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/cell_line="A-172"
/tissue_type="glioblastoma"
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GLGSSMYPRFCARADDIDOKLSHLGASQLTPMGEGDELSGQEDAFRSWAVQTFKAACE
TFDVRGKOH (O I FKLYTSNYTWDPHYRLKYDDSOPLDISKALSSMHAKNVFTYRRLKSR
QNLØSPTSRATILVELSCEDGQCHNYLPGEHLGVCDGNDFALVQGILERVUDGPTPH
QTVRLEALDESGSYWVSDKRLPPCSLSOALTYFLDITTPDTQLLLQKLAQVATEEPER
QRLEALCOPSEYSKWKFTNSPTFLEVLEEPFSLRVSAGFLLSQLPILKRPRYSISSSR
DHTPTEIHLTVANVTYHTRDGOGPLHGVCSTWLNSLKPODPVPCFVRNASGFHLPED
BSHPCILIGPGTGIAPFRSFWQORLHDSOHKGVRGGRWTLVFGCRRDDEDHYQEEML
EMAOKGVLHAVHTAYSRLPGKFNVYVQDILRQQLASEVLRVLHKEPCHLYVCGDVRMA
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BHLARVEAVTKEIETTGTYQLTGDELLFATKOAWRAPKCIGRIQMSNLOVFDARSCS
TAREMTEHICHHVRYSTUNGNIRSAITTVFPQRSDGKHDFRVWNAQLIRVAGYQMPDGS
IRGDPANVEFTQLCIDLGWKPKYGRFDVVFLVLQANGRDPELFEIPPDLVLEVYAMEH
KYEWFRELELKWYALPANAMILLEVGGLEFPGCPFNQWYMGTEIGVBDFCDVQRYNIL
EEVGRRWGLETHKLASLWKDQAVEINIAVLHSFQKQNUTIMDHISAAESFMXYMQNE
KREIPLKVLVVAARDROSSITPVFHQBMLNVVLSPFYYQVEAWKFNYMQDEKRP
KRRGGCPADWIWLVPPMSGSITPVFHQBMLNVVLSPFYYYQVEAWKFNYMQDEKRP
KRRGGLPLKVLVKAAVLFACMLNEXTMASRVRVTILFAAETGKSEALAWDLGALFSCAFN
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/db_xref="01:1228940"
/translation="MACPWKFLFKTKFHQYAMNGEKDINNNVEKAPCATSSPVTQDDL
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                                                GGAAAACCCATGTCTGGCAGGACGAGAAGCGGAGACCCCAAGAGAAGAGAGATTCCATTGA
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	OV Db Qy	Qy 2 Qy 2 Qy 2 Qy 2			Qy 2 Db 1 Qy 2 Db 2		0y 1:		Qy 18
81 GACAGAGGCTGGAGGCCCTGTGCCAGCCCTC 81 GCCCCACATTCCTGGAGGTGCTAGAGGAGTT	653 ACAAGAGGCTGCCCCCCTGCTCACTCAGG	CCCAGGCAACCAGGCGGCCTTGGTCCA 	413 GGCTCAAATCTCGGCAGAATCTACAAAGTCC	293 AGCTCTACACCTCCAATGTGACCTGGGACC	173 TGGGAGAAGGGGATGAGCTCAGTGGGCAGGA 	053 ACAACAATTCAGGTACGCTGTGTTTGGCCT	741 GGCTGAGCTGCCTGGCAATGGAGAGAAA 993 GAGACTGCCCTGGCAATGGAGAGAAA	873 ACCTGGGGGCCTTATTCAGCTGTGCCTTCAA	813 GAGTCAGAGTCACCATCCTCTTTGCGACAGA
AGAGTACAGCAGAGTTCACCAACA 264 AGAGTACAGCAAGTGGAAGTTCACCAACA 264 ACCGTCCCTGCGGGTGTCTGCTGGCTTCC 289 CCCGTCCCTGCGGGTTLLLLLLLLLLLLLLLLLLLLLLL	AGGCCCTCACCTACTCCCCGGACATCACC	ATCCTGGAGCGAGTGGTGGATGGCCCA 259	ACATCCAGCCGTGCCACCATCCT LIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	CGCACCACTACAGGCTGCTGCAGGACTCAC 2352	AGGACGCCTTCCGCAGCTGGGCCGTGCAAA 2232	COGCTCCAGCATGTACCCTCGGTTCTGCG 2112	AAATCGCTCTTCATGCTGAAAGAGCTCA 205	CCCCAAGGTTGTCTGCATGGATAAGTACA 1932	GACAGGAAAATCAGAGGCGCTGGCCTGGG 1872

STGTACAGTTATT 4032	GTGACCACCAGGAGGTGCTATCGCACCACTGTGTATTTAACTGCCTTG	3973	Qy
GCACCACTTCA	TGCCAGGCCTGGCAAGTGGGTGAAAGATGGAACTTGCTGAG	3721	Db
GCACC	AAATGCCAGGCCTGGCGAGTGGGTG	3913	Qy
SAGACAAATCTT 3912 SAGACAAAATCTT 3720	ATTGATCGGAGCCTCCTCTCTAAACTGGGGCCTCCCTGGTCCCTTGG	3853 3661	Qy Db
GTAGCACCCTGG 366	TCCTCAACGTTGCTCCCCATCAAGCCCTTTACTTGACCTCCTAACA	3601	Db
GTAGCACCCTGG 38	GCCCTTTACTTGACCTCCTAACA	3793	Оy
CTCAAGTCTTA	CCCCCAG	3541	Db
CTCAAGTCTTAT 3792	TGAGGTCACAGGGCCTGGGGAGATGGAGGAAAGTGATATCCCCCA	3733	Qy
GCTCTGCATTA	AAGCTGCCGGCACAGAACTTAAGGATGGAGCC	3481	Db
GCTCTGCATTAT 3732	TACAGGAGGGGT	3673	Qy
CECTCTGAGGG	GAAGAAGGACAGGGTGCGGTGCAGCCCAGCAGCCTGGAGATGTCA	3421	Db
CGCTCTGA	AAGAAGGACAGGGTGGCGGTGCAGCCAGCA	3613	ОУ
TTCCTTACGAG	ACGAAGATATCTTTGGTGCTGTAT	3361	Db
TTCCTT	GCTCAAGAGCCAGAAGCGCTATCACGAAGATATCTTCGGTGCTGTAT	3553	Qy
ACTATTTCTTT	GTTGCCTGCCAAGCTGAAATTGAATGAGGAGCAGCTCGAGG	3301	Db
ACTATTTCTTTC 3552	GCAGCTGGTGGCTGCCAAGCTGAAATTGAATGAGGAGCAGCTCGAGG	3493	QY
CCACACCCTG	CGGGGATGTGCGCATGGCCCGGGACGTGG	3241	Db
CCCACACCCTGA 3492	AGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACGTGG	3433	Qy
CCACAAGGAG	CCTGCGGCAGCTGGCCAGCGAGGTGCTCCGTGTGC	3181	Db
TCCACAAGGAGC 3432	TCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGC	3373	ОУ
CAAGGTCTAT	ATGCGGTGCACACAGCCTATTCCCGCCTGCCAGC	3121	Db
CCAAGGTCTATG 3372	GGTGCTGCATGCGGTGCACACACAGCCTATTCCCGCCTGCCT	3313	Оу
GGCCCAGAA	GAGGACCACATCTACCAGGAGGAGATGCTGGAGA	3061	Дb
TGGCCCAGAAGG 3312	CCGCCGCCCAGATGAGGACCACATCTACCAGGAGGAGATGCTGGAGA	3253	Qy
GGTGTTTGGG	TGCGGGGAGGCCGCATGACCT	3001	Db
TGGTGTTTGGGT 3252	GCTCCATGACTCCCAGCACAAGGGAGTGCGGGAGGCCGCATGACCT	3193	Qy
CTGGCAGCA	GCATCCTCATCGGGCCTGGCACAGGCATCGCGCCCTTCCGCAGTT	2941	DЬ
TCTGGCAGCAAC 3192	TTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGCAGTT	3133	VΩ
TCCCTCCCA	GCCCTGCTTTGTGCGGAATGCCAGCGGCTTCCACCTCCCCGAGG	2881	рь
ATCCCTCCCATC 3132	AGTGCCCTGCTTTGTGCGGGAATGCCAGCGCCTTCCACCTCCCCGAGG	3073	УО
GCCCCAAG	AGCCTGA	2821	Db
GCCCCAAGAC	GGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAAC	3013	Qy
CCGAGATGG	TGTGGCCGTGGTCACCTACCACA	2761	DЬ
CGGAGATGGC	CACGCCACGGAGATCCACCTGACTGTGGCCGTGG	2953	Qy
CTCCCGGGATC 2760		2701	Db

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Mammalia; Eutheria; Primates; Catarrhini;
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/protein_id="AAA36375.1"
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/translation="MACPMKPLFKTKFHQYAMNGEKDINNNVEKAPCATSSPVTQDDL
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	AAGCTCTACACCTCCAATGTGACCTGGGACCGCACCACTACAGGCT	AACCTTCAAGGCAGCCTGTGAGACGCTTTGATGTCCGAGGCAAACAGC 	ATGGGAGAAGGGGATGAGCTCAGTGGGCAGGAGGACGCCTTCCGCAG 	GCCTTTGCTCATGACATTGATCAGAAGCTGTCCCACCTGGGGGCCTC 	AACAACAAATTCAGGTACGCTGTGTTTTGGCCTCGGCTCCAGCATGT:	GGAGACTGCCCTGGCAATGGAGAAACTGAAGAAATCGCTCTTCATG 	AGGCTGAGCTGCCTGGAGGAGGAACGGCTGCTGTTGGTGATGACCAG 	GACCTGGGGGCCTTAITCAGCTGTGCCTTCAACCCCAAGGTTGTCTG 	GAGTCAGAGTCACCATCCTCTTTGCGACAGAGACAG 	AAAGTCTTGGTCAAAGCTGTGCTCTTTGCCTGTATGCTGATGCGCAAG 	CAGGACGAGAAG CAGGACGAGAAG	AGGAGATGCTGAACTACGTCCTGTCCCCTTTCTACTACTA 	GCTGCCCGGCAGACTGGATTTGGCTGGTCCCTCCCATGTCTGGGAG 	ACCACTCGGCTGCAGAATCCTTCATGAAGTACATGCAGAAATGAATA 	TTGAGATCAACATTGCTGTGATCCATAGTTTTCAGAAGCAGAATGT 	CAGGAGAATGGGCCTGGA 	.CAGAGATCGGAGTCCGGGACTTCTGTGACGTCCAGCGCTACAACATC 	
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3360	1 GCCAGGCCACCTCTATGTTTGCGGGGATGTGCGCATGGCCCGGGACGTGGCCCACACCCT 	3431 3301	Qy Db
30	TGTTCAGGACATCCTGCGGCAGCAGCTGGCCAGCGAGGTGCTCCGTGTGCTCCACAAGG	24	Дy
3240		ũ	Db
3370	GGGGGTGCTGCATGCGGTGCACACACCCTATTCCCGCCTGCCT	31	Qy VQ
3310	TGCCGCCGCCAGATGAGGACCACATCTACCAGGAGAATGCTGGAGATGĞCCCAGAA		70 VQ
12	ACGCTCCATGACTCCCACCACAAGGAGTGCGGGGAGGCCGCATGACCTTGGTGT		Qy Db
3060	TCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGCGCCCTTCCGCAGTTTCTGGC	00	Db
19	TCCTTGCATCCTCATCGGGCCTGGCACAGGCATCGTGCCCTTCCGCAGTTTCTGGCAGCA	3131	Qy
	CCCAGTGCCCTGCTTTGTGCGGAATGCCAGCGCCTTCCACCTCCCGAGGATCCCTCCC	3071 2941	Оу
	CAGGGTCCCCTGCACCACGGCGTCTGCAGCACATGGCTCAACAGCCTGAAGCCCCCAAG	8	рь
07	CCAGGGTCCCCTGCACCACGGTGTCTGCAGCACATGGCTCAACAGCCTGAAGGCCCCAAGA	$\dot{\Gamma}$	Qy
œ	TCACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCACACACA	82	Db
3010	CACACGCCCACGGAGATCCACCTGACTGTGGCCGTGGTCACCTACCACACCGGAGATG	9	Qy
	CONGONTRICCAGGICCCCCATICIGAAGCCCAGGITCTACTCCATCAGCCCCCCGGGA CCTGCTTTCCCAGCTCCCCCATTCTGAAGCCCAGGTTCTACTCCATCAGCTCCTCCCGGGA	2891	Оу
95	AGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCGGGTGTCTGCTGGCTT	70	DЬ
2890	CAGCCCCACATTCCTGGAGGTGCTAGAGGAGTTCCCGTCCCTGCCGGGTGTCTGCTGCTTT	2831	Qy
70		6 7	QУ
64	ACACCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAGAAGAGCCTGA	UT.	Db
2770	CACACCCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCCAGGTGGCCACAGAAGAGCCTGA	71	Qy
58	TCAGCCAGGCCTCACCTACTTCCTGGACATCAC	ū	рь
2710	GACAAGAGGCTGCCCCCTGCTCACTCAGCCAGGCCCTCACCTACTCCCCGGACATCAC	6	Qy
2520	ACTGGGTCAG	*	Db
2650	ACACCCCACCAGACAGTGCGCCTGGAGGACCTGGATGAGAGTGGCAGCTACTGGGTCAG	59	ОУ
	TIGCCCAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGGTGGATGGCCC	40	Db 1
	CAGGCAACCAGCCGGCCCTGGTCCAAGGCATCCTGGAGCGAGTGGTGGATGGCCC	ω 1	0v
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Ġ	actetectgtgaggatggccaaggcetgaactacetgcegggggagcacetteggg	171	ΟV
34	ATCCTGGT	281	Db 49
47	COTTABARTOTOCCOAGAATOTACAAAGTCCGACATCCAGCCGTGCCACCATCCTGGT	111	2 5
2	ACAGCCTTTGGACCTCAGCAAAGCCCTCAGCAGCATGCCATGCCAAGAACGTGTTCACCAT 2	2221	办

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (28-JAN-1994) Rainer Maier, Medicine, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0663,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Maier,R., Bilbe,G., Rediske,J. and Lotz,M.
Inducible nitric oxide synthase from human articular chondrocytes:
cDNA cloning and analysis of mRNA expression
Biochim. Blophys. Acta 1208 (1), 145-150 (1994)
94368816
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OYHNLSKOQNESSOPLVETGKKSPESLVKLDATPLSSPRHVRIKNWGSGMTFQDTLH
KAKGILTCRSKSCLGSIMTPKSLTRGPROKFTPFDELLPQAIEFVNQYYGSLKEAKIE
EHLARVERAVTKELETTVYTYGLTGDELLFATKQAMRNAPRCIGRIOWSNLOVFDARSCS
TAREMFEHICRHVRYSTNNGNIRSAITVFPQRSDGKHDFRVWNAQLIRYAGYQMPDGS
IRGDPANVEFTQLCIDLGWKFKYGFDVPLVLQANGRDPELFFELPPDLVLEVAMEHP
KYEWFRELELKWYALPAVANMLLEVGGLEFFGCFFROWSWMGTEHGVRDFCDVQRYNIL
EEVGRRWGLETHKLASLWKDQAVVEINIAVLHSFOKQNVTIMDHSAAESFMKYMQNE
YRSRGGCPADWIWLYPPMSGSITPVFHOEMLNYVLSPFYYQVBAWKHHWWQDEKRRP
KREIFLKVLVKAVLFAAMLMKRTMASSFWRVTILFATETGKSEALAWDLGALFSCAFN
KREIFLKVLVKAVLFAAMLMKRTMASSFWRVTILFATETGKSEALAWDLGALFSCAFN
FRYVCWDKYRLSCLEEERLLLVYTSTFGNGDCPGNGEKLKKSLENNKFRYAVF
GLGSSMYPRFCAFAHDIOQKLSHLGASQUITWGDEBLESGEDAGSGEDAFRSWAVQTFKAACE
TFDVRGXQHIQLFUXTSTWYDDPHYRLVQDSOPLDLSKALSSMHAKNVFTMRLKSR
QNUQSPTSSRATILVELSCEDGGCLNYLPGEHLGVCPGNQPALVGGILERVVDGFTPR
OAVRLEALDESGSYWVSDKRLPPCSLSQALTYFILDTTPPTQLLLQKLAQVATEEPER
OPILPHTOODERVS KALEFTNENDETT FUT TETEFOT TO TO THE TO THE PET TO THE T
                   PSHPCILIGPGTGIAPFRSFWÖORLHDSQHKGVRGGRMTLVFGCRRPDEDHIYQEEML
EMAQKGVLHAVHTAYSRLPGKPKVYVQDILRQQLASEVLRVLHKEPGHLYVCGDVRMA
                                                              QRLEALCQPSEYSKWKFTNSPTFLEVLEEFPSLRVSAGFLLSQLPILKDRFYSISSPR
DHTPTEIHLTVAVVTYHTROGQGPLHHGVCSTWLNSLKPQDPVPCFVRNASGFHLPED
\mathtt{RDVAHTLKQLVAAKLKLNEEQVEDYFFQLKSQKRYHEDIFGAVFPYEAKKDRVAVQPS}
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/protein_id="AAA56666.1"
/db_xref="GI:452488"
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ACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCCAGCGGAGTGATGGCAAGCACG
                        ACAATGGCAACATCAGGTCGGCCATCACCGTGTTCCCCCAGCGGAGTGATGGCAAGCACG
                                                                                GCTGTTCCACTGCCCGGGAAATGTTTGAACACATCTGCAGACACGTGCGTTACTCCACCA
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